SAN GABRIEL RIVER BRIDGE RAIL UPGRADE AND WIDENING PROJECT

City of Long Beach, Los Angeles County, California
District 7 – LA – 001 (PM 0.04)
EA 32090 – EFIS 0716000043

MITIGATED NEGATIVE DECLARATION/FINDING OF NO SIGNIFICANT IMPACT AND SECTION 4(f) EVALUATION

DECEMBER 2022

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans.

Prepared by:
The State of California, Department of Transportation

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MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to upgrade the existing San Gabriel River Bridge railing (Bridge No. 53-0060) with concrete barrier Type 80SW and widen the bridge to current standards. The bridge is located over the San Gabriel River Channel in the City of Long Beach on State Route (SR) 1 and connects Long Beach to Seal Beach. The Project limit is located on SR-1 at Post Mile (PM) 0.04.

The proposed project is classified as a Category 4B project, as defined in the Caltrans Project Development Procedures Manual (PDPM), because this project does not require substantial new right-of-way and does not substantially increase traffic capacity. One (1) No-Build and two (2) Build Alternatives were considered for this project. Caltrans is the lead agency pursuant to the National Environmental Policy Act (NEPA) and California Environemtal Quality Act (CEQA).

Determination

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

The proposed project would have no effect on: Agriculture and Forest Resources, Cultural Resources, Energy, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, and Wildfire.

In addition, the proposed project would have less than significant effects to: Aesthetics, Air Quality, Climate Change, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Utilities and Service Systems.

With mitigation measures incorporated, the proposed project would have less than significant effects to the following resources: Biological Resources and Mandatory Findings of Significance.

Ronald Kosinski

Ronald Kosinski
Deputy District Director
Division of Environmental Planning – District 7
California Department of Transportation

Dec. 19, 2022
Date

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CALIFORNIA DEPARTMENT OF TRANSPORTATION
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

FOR

San Gabriel River Bridge Rail Upgrade and Widening Project

The California Department of Transportation (Caltrans) has determined that Build Alternative 3, Single-Side Widen (Preferred Alternative) will have no significant impact on the human environment. The FONSI is based on the attached Environmental Assessment (EA) which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project, and the appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA (and other documents as appropriate).

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated May 27, 2022, and executed by FHWA and Caltrans.

Dec. 19, 2022

Date

Ronald Kosinski
Deputy District Director
Division of Environmental Planning, District 7
California Department of Transportation

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07-LA-001-PM 0.04
EA: 32090
EFIS: 0716000043

San Gabriel River Bridge Widening Project
State Route 1, Post Mile 0.04
In the City of Long Beach, Los Angeles County

INITIAL STUDY WITH PROPOSED NEGATIVE DECLARATION/ENVIRONMENTAL ASSESSMENT and Draft Section 4(f) Evaluation

Submitted Pursuant to: (State) Division 13, California Public Resources Code

(Federal) 42 USC 4332(2)(C) AND 49 USC 303

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated May 27, 2022, and executed by FHWA and Caltrans.

THE STATE OF CALIFORNIA

Department of Transportation

Responsible Agencies: City of Long Beach, California Department of Fish and Wildlife, Regional Water Quality Control Board, State Office of Historic Preservation, United States Army Corps of Engineers, California Transportation Commission

July 28, 2022

Date

Ronald Kosinski

Ronald Kosinski
Deputy District Director
Division of Environmental Planning – District 7
California Department of Transportation

The following person may be contacted for more information about this document:

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

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Chapter 1 – Proposed Project

1.1 Introduction

NEPA Assignment

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), is the lead agency under the National Environmental Policy Act (NEPA). Caltrans is the lead agency under the California Environmental Quality Act (CEQA).

California participated in the "Surface Transportation Project Delivery Pilot Program" (Pilot Program) pursuant to 23 USC 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the Department entered into a Memorandum of Understanding pursuant to 23 USC 327 (NEPA Assignment MOU) with FHWA. The NEPA Assignment MOU became effective October 1, 2012, and was renewed on May 27, 2022, for a term of ten years. In summary, the Department continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and the Department assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to the Department under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

The San Gabriel River Bridge (No. 53-0060) Rail Upgrade and Widen Project (Project or proposed Project) proposes to upgrade the existing bridge railing with concrete barrier Type 80SW (or other California Coastal Commission approved bridge railing type) and widen the bridge to current standards. The bridge is located over the San Gabriel River Channel in the City of Long Beach on State Route 1 (SR-1) at Post Mile (PM 0.04) that connects the cities of Long Beach and Seal Beach**.** This project aims to improve mobility and enhance traffic safety for all users by upgrading the bridge railing to a California Coastal Commission approved bridge railing and widening the existing 5-foot shoulder that serves as a bike lane to a standard 8-foot shoulder. The project would also extend the sidewalk at four corners of bridge to provide pedestrian sidewalk continuity in the areas where gaps exist. The Project would incorporate active transportation (Complete Streets) elements and fulfill Americans with Disabilities Act (ADA) requirements. Figure 1.1-1 shows the Project regional location and Figure 1.1-2 shows the Project vicinity and location.

The Project is funded by the 2020 State Highway Operation and Protection Program (SHOPP), under the Bridge Rehabilitation Program Code 20.20.201.110 for delivery in the fiscal year 2023/2024. This project is also eligible for Federal-aid funding, therefore both State and Federal environmental reviews are being conducted. Project documentation has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA) and the California Environmental Quality Act (CEQA). As the lead agency under NEPA and CEQA, Caltrans is responsible for the environmental review, consultation, and any other action required in accordance with applicable federal and state laws for this Project.

This project is included in the Fiscal Year 2019 Federal Transportation Improvement Program (FTIP) (ID LALS04) and in the 2020-2045 Southern California Association of Governments

(SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). **Both the FTIP and RTP listings can be found in Appendix H.**

Figure 1.1-1 Project Regional Location

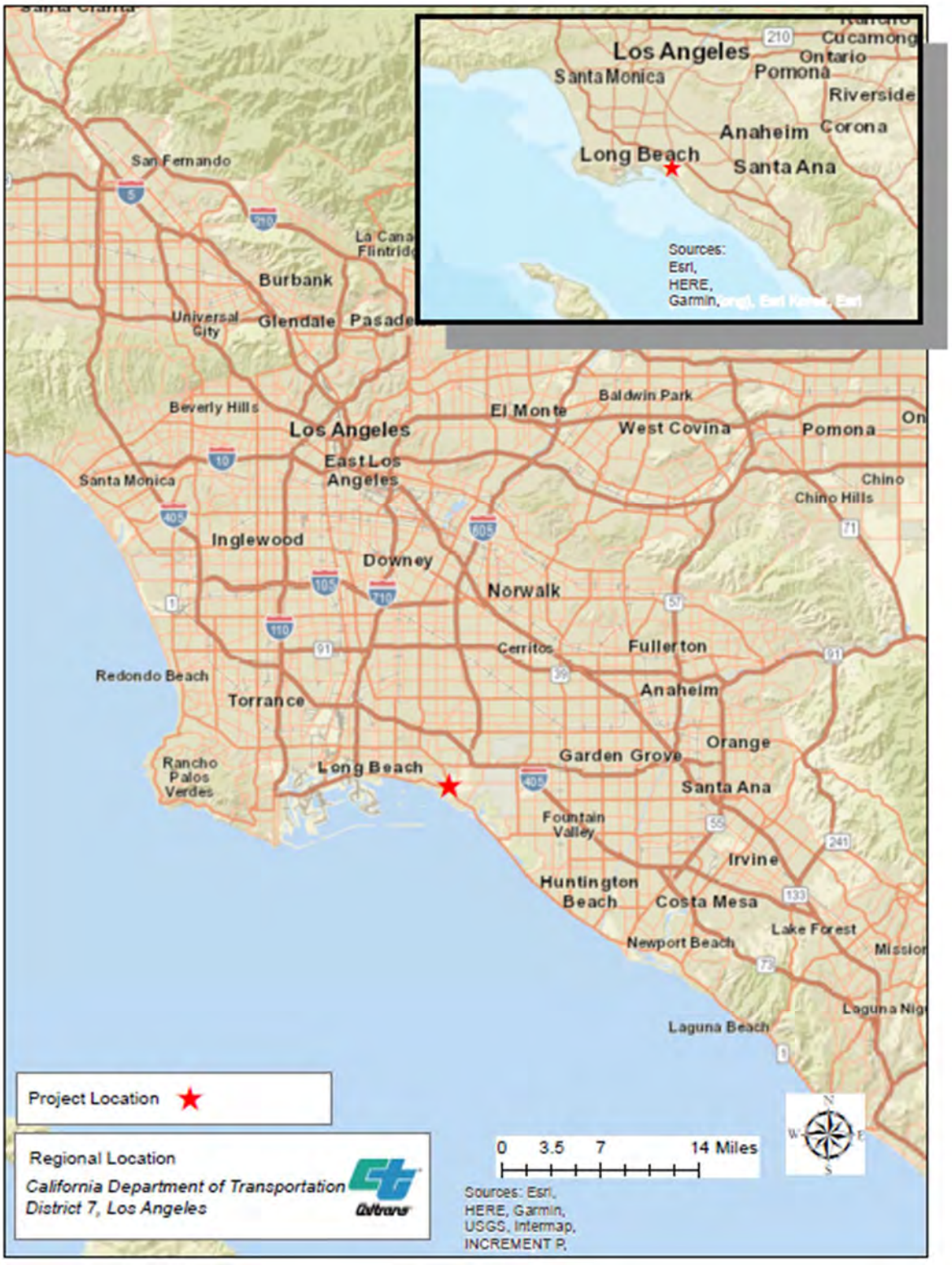
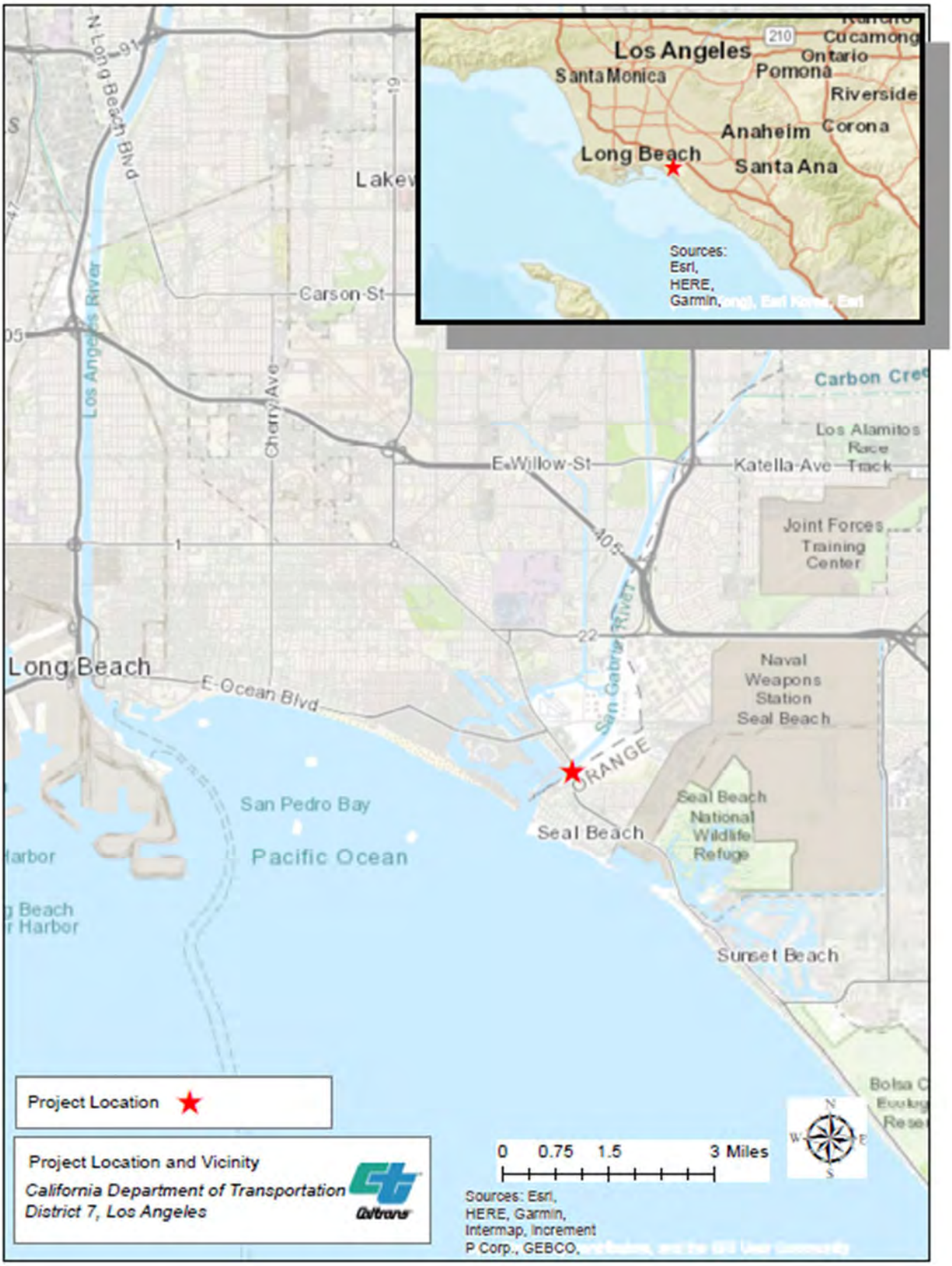


Figure 1.1-2 Project Location and Vicinity



1.2 Purpose and Need

1.2.1 Purpose

The primary purpose of the proposed Project is to upgrade the bridge railing and bridge width on the San Gabriel River Bridge (No. 53-0060) on SR-1 in The City of Long Beach to current standards. The Project also aims to improve safety for all user types including, but not limited to, traveling motorists, bicyclists, and pedestrians and will fulfill Americans with Disabilities Act (ADA) requirements. Overall, the Project will help achieve the goals of the 2020-2045 Southern California Association of Governments RTP/SCS by improving mobility, accessibility, reliability, and travel safety for people, in addition to enhancing the preservation and resilience of the regional transportation system.

1.2.2 Need

The existing bridge railings do not meet current standards and the bridge was identified in the State's Bridge Rail Program for bridge rail replacement. In addition, the existing bridge median, shoulders, sidewalks, and curb ramps do not meet current standards. Therefore this project is needed to continue the District's efforts to eliminate non-standard bridge and roadway features.

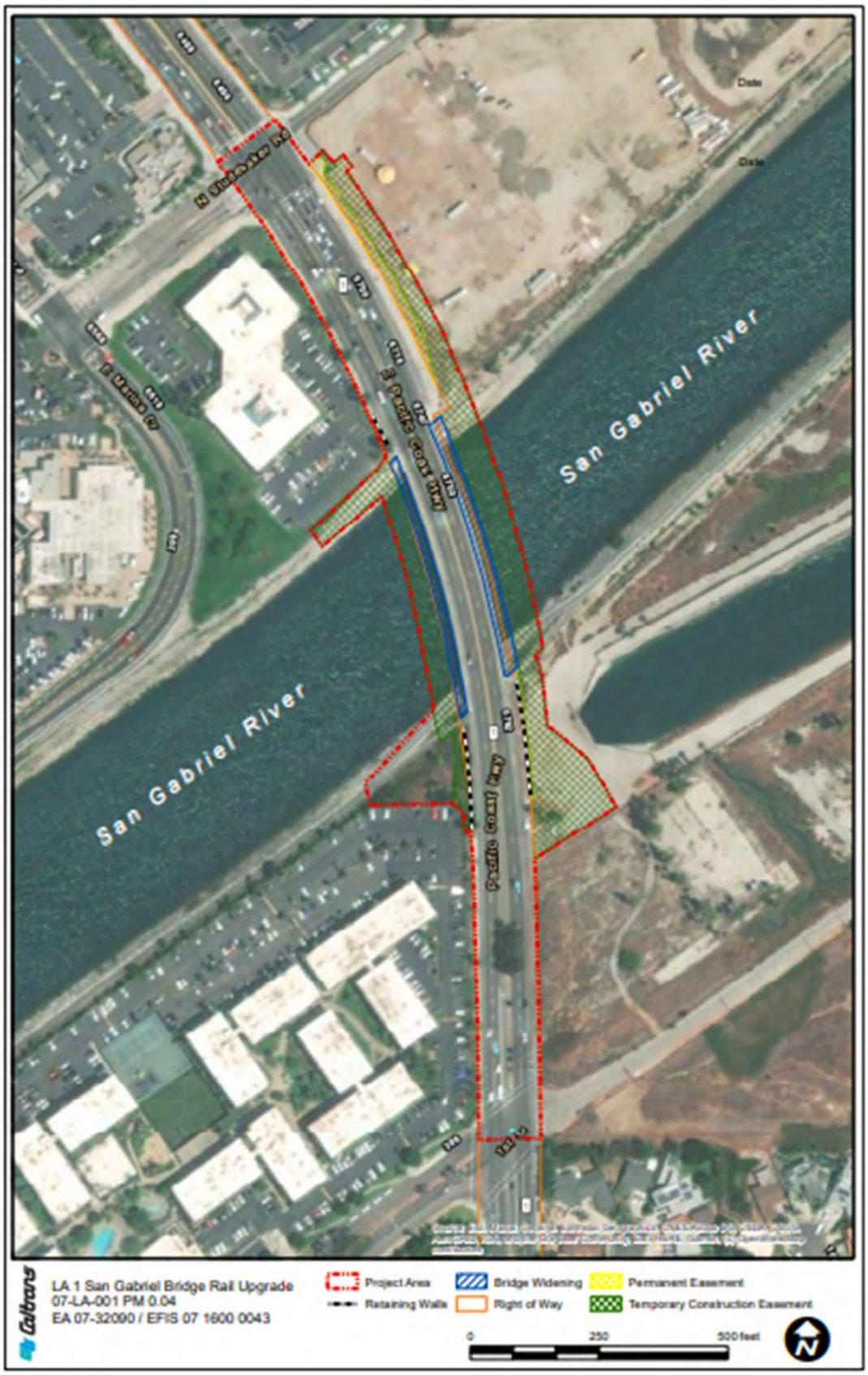
1.2.2.1 Capacity, Transportation Demand, and Safety

Existing Facilities

The San Gabriel River Bridge (No. 53-0060) is a part of SR-1 in the City of Long Beach. SR-1 serves as the main north-south Regional Corridor connecting the City of Long Beach and the City of Seal Beach. The bridge was built in 1931 and was extended on both ends in 1962.

Within the project limits, this segment of SR-1 consists of four lanes (two in each direction). The existing lane and shoulder widths are 12 feet and 5 feet respectively, and the existing median is 2 feet. This project segment is included in the City of Long Beach's bicycle system and the existing shoulders serve as bike lanes. The bridge sidewalk width is 5 feet and does not have any sidewalk curb ramps at either ends of the bridge. The width of the San Gabriel River Bridge between curbs is 60 feet. There are no traffic control features to slow the flow of traffic within the Project limits.

Figure 1.2-1 Existing Conditions



Existing Bridge and Roadway Deficiencies

Bridge and roadway deficiencies within the Project area, identified during the initial Project scoping and based on input from the Project Development Team (PDT), include the following:

- Metal beam guardrail posts are substandard in height.
- Existing curve radius and super-elevation does not meet design speed requirements.
- Existing 2-foot wide median does not meet the minimum width standard of 12 feet.
- Existing 5-foot wide bridge sidewalk does not meet the minimum width requirement and latest highway design standard requirement of 6 feet. Narrow sidewalks reduce pedestrian comfort.
- Existing concrete balustrades type bridge railing does not meet the latest highway design standard.
- Existing 5-foot wide shoulders do not meet the latest highway design standard of 8-foot width.
- Existing 5-foot wide shared shoulder/bike lane does not meet the minimum bike lane width requirement of 8 feet. The existing roadway facility contains a Class II bike lane. The 5-foot wide shoulders do not currently provide a 2 foot buffer for safety.

Safety

Improving and correcting roadway deficiencies are key objectives of the proposed Project. The existing roadway within the Project area consists of a portion of SR-1, where the existing shared shoulder/bike lane and the existing pedestrian sidewalk do not meet current Caltrans' HDM standards . The existing sidewalk curb ramps do not meet current Americans with Disabilities Act (ADA) standards. The proposed project would enhance safety for all user types, and aims to promote Complete Streets and a more multi-modal transportation network.

1.2.2.2 Social Demands or Economic Development

State-Route 1 (SR-1) is a north/south state conventional highway that provides recreation, interregional, commuter and local travel through an urban as well as rural corridor. The project is located on a segment of SR-1 that is classified as eligible for scenic highway status. The City of Long Beach General Plan and the City of Seal Beach General Plan identify the Project study area as having open space, multi-family residential, and commercial land uses, with specific plan and residential high-density zoning classifications. Currently, the Project study area consists of open and vacant lands, business office spaces, and some residences. The City of Seal Beach General Plan contains goals to provide and maintain a comprehensive circulation system that facilitates the safe and efficient movement of people and goods within the City to areas outside its boundaries. Additionally, objectives of the City of Seal Beach's General Plan include: supporting the protection and enhancement of view corridors and providing a citywide system of safe, efficient, and attractive bicycle and pedestrian routes for commuter, school, and recreational use. The City of Long Beach shares similar goals of providing a more multi-modal transportation network and ensuring that Coastal Act policies are incorporated into development and transportation projects.

SCAG's regionally adopted growth projections in the 2020-2045 RTP/SCS, informed by U.S. Census data, indicate that Los Angeles is the densest urbanized area in the United States and continued growth is forecast in Los Angeles County. As the population grows in Los Angeles County and Orange County, traffic demand increases. Transportation facilities need to be upgraded to accommodate existing and future transportation demands for all roadway users.

1.2.2.4 Modal Interrelationships and Linkages

State Route 1 (SR-1)is a north-south route, although much of the alignment within the City of Long Beach runs in an east-west direction. It serves as a popular alternative to freeway travel and is an important part of the Southern California transportation network. In addition to providing access to coastal areas, SR-1 helps to provide access to numerous nearby transportation facilities within Long Beach and the surrounding areas. These include: the Alamitos Bay Marina; the Long Beach International Airport; the Long Beach Bus (Greyhound) Station; the Metro A Line (formerly the Blue Line); the Ports of Los Angeles and Long Beach; and Los Angeles International Airport.

1.3 Independent Utility and Logical Termini

Federal Highway Administration (FHWA) regulations (23 Code of Federal Regulations [CFR] 771.111 [f]) require that projects being evaluated under NEPA have "independent utility" and "logical termini". Logical termini are defined as rational end-points for transportation improvement and analysis of the potential environmental impacts of a proposed Project. A project is defined as having independent utility if it meets the project purpose regardless of other improvements in the project limits. A proposed project has independent utility and logical termini as defined under 23 CFR 771.111(f) if the following conditions are met: the action evaluated:

1. It connects logical termini and is of sufficient length to address environmental matters on a broad scope.

2. It has independent utility or independent significance (it is usable and a reasonable expenditure of funds even if no additional transportation improvements in the area are made).

3. It does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

As discussed below, the proposed Project would comply with these requirements.

1.3.1 Independent Utility

The proposed Project would have independent utility. The proposed Project would upgrade the San Gabriel River bridge (Bridge No. 53-0060) railing and bridge width to current standards. The Project would improve safety for all user types, including, but not limited to vehicles, bicyclists, and pedestrians. The proposed Project is a standalone project intended to ensure the safety and reliability of the traveled roadway on SR-1. This Project is not dependent on the implementation of other Caltrans projects on SR-1 prior to or subsequent to this proposed undertaking. The Project would fulfill its purpose, benefit the local Long Beach and regional community, and be a reasonable expenditure of funds even in the absence of other transportation improvement projects in the area.

1.3.2 Logical Termini

According to FHWA criteria, a project demonstrates logical termini if it contains (1) rational end points for transportation improvements and (2) rational end points for environmental review of the project footprint. The proposed bridge improvements begin and end at the most rational end points, which include all bridge railing in need of upgrade and the entire extent of the bridge that needs to be widened to current standard. The environmental document studies the entire Project area and is not dependent on the environmental document or mitigation proposals of any other project.

1.4 Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the Project, while avoiding or minimizing environmental impacts. The San Gabriel River Bridge (Bridge No. 53-0060) Rail Upgrade and Widen Project proposes to upgrade existing bridge railing with concrete barrier Type 80SW (or other California Coastal Commission approved bridge railing type) and widen the bridge to meet current standards. The proposed project is located along SR-1 at Post Mile (PM) 0.04 in the City of Long Beach in Los Angeles County. The alternatives include Alternative 1 (No Build), Alternative 2 (Symmetric Widen), and Alternative 3 (Single Side Widen).

The bridge currently has two 12-foot wide travel lanes, a 5-foot wide shoulder, and a 5- foot wide sidewalk in each direction, along with a 2-foot wide median. The existing super elevation (the banking of the roadway as it curves to prevent cars from skidding or tipping over) does not meet current design speed requirement. The existing pedestrian sidewalk lacks continuity and sidewalk curb ramps do not meet current ADA standards. The proposed project aims to upgrade these bridge and roadway features to current standards and improve mobility and traffic safety for all users.

Both Build Alternatives 2 and 3 propose to widen the sidewalk to 8 feet on both sides of the bridge to meet current standards and to provide a more comfortable width for pedestrians. The proposed sidewalk extension on the southwest side of the bridge will provide continuous sidewalk access and improve safety for pedestrians on southbound SR-1. The widening of the shoulder to 8 feet will also improve safety for bicyclists currently utilizing the nonstandard 5-foot wide shoulder.

A Transportation Management Plan (TMP), applicable for both the Build Alternatives 2 and 3, was approved on January 26th, 2022. The TMP identified methods during the construction phase of the project to reduce traffic delays, maintain traffic flow, and provide a safe environment for the work force and traveling public. Elements in the TMP data sheet include the following:

- Public Information (Press Release, Internet)
- Motorist Information Strategies (Changeable Message Signs [portable])
- Incident Management (Construction Zone Enhancement Enforcement Program [COZEEP])
- Construction Strategies (Lane Requirement Charts)

The proposed project would require temporary access to the San Gabriel River bike path, which crosses through the project area underneath the bridge. There would be minimal disruption to movement on the bike path due to temporary installation of a bridge demolition trestle platform and protective canopies at the bridge location, which would serve to maintain access to the bike path throughout the duration of the project. Throughout construction, one

sidewalk would be required to be kept open. Therefore, the project would require two stages of construction to minimize inconvenience to pedestrians and motorists. Vegetation control would be placed beneath the guardrail as needed to reduce erosion potential. Additional right of way acquisitions in the form of temporary easement, permanent easement and temporary construction easement would be required.

1.5 Alternatives

There are three alternatives for this Project that are evaluated in this document, a No Build and two Build Alternatives. The Alternatives are as follows:

Alternative 1: No Build Alternative

The No Build Alternative would retain the existing bridge and roadway geometric features and maintain SR-1 as it is currently. The No Build Alternative would do nothing to meet current bridge safety standards.

Alternative 2: Build Alternative- Symmetric Widen

This Build Alternative would replace the existing San Gabriel River bridge (Bridge No. 53-0060) rail with Type 80SW (or other California Coastal Commission approved bridge railing type) and widen the bridge to meet current design standards. The proposed 11’9” foot widening of the bridge on each side would provide two standard 12- foot lanes, a standard 8- foot outside shoulder, and a standard 8- foot sidewalk in each direction with a standard 12-foot median. Retaining Walls would be added on the southwest end the northwest end of the project. There is a gap in the existing sidewalk at the southwest end of the bridge. At this location, approximately 190 feet of new sidewalk is proposed to provide sidewalk continuity The bridge deck and approaches would be resurfaced and pavement delineation would be added to accommodate the new widened bridge.

The existing Metal Beam Guardrail (MBGR) will be upgraded to Midwest Guardrail System (MGS). Vegetation control will be placed as needed.

Build Alternative 2 would include installation of four (4) access road driveway ramps – two (2) access driveway ramps to the San Gabriel River Bike Trail at the south end and two (2) access driveway ramps to the maintenance access road at the north end of the bridge. The adjoining roadway at each end of the bridge would be widened as it transitions backs to the existing width of SR-1. No right of way acquisition is anticipated. However, Temporary Construction Easements (TCE) for construction staging would be required from various property owners to construct the proposed retaining wall for the transition pavement off the bridge. Two existing light poles will be relocated within Caltrans’ Right-of-Way. The utilities under the existing bridge overhang on either side of the bridge would be impacted. All other utilities would need to be protected in place. Utility relocation and coordination with utility providers is required.

Alternative 3: Build Alternative- Single Side Widen (Preferred Alternative)

This Build Alternative would replace the existing San Gabriel River bridge (Bridge No. 53-0060) railing with Type 80SW (or other California Coastal Commission approved bridge railing type) and widen the bridge to meet current design standards. The proposed 23'-6" foot widening of the bridge on the northeast side (northbound direction) would provide two standard 12-foot wide lanes, a standard 8-foot outside shoulder, and a standard 8-foot sidewalk in each direction with a standard 12-foot median. A retaining wall would be added on the southeast end of the project. There is a gap in the existing sidewalk at the southwest end of the bridge. At this location, approximately 200 feet of new sidewalk is proposed to provide sidewalk continuity. Replacement sidewalk is proposed on the northeast side until N. Studebaker Rd.

The adjoining roadway at each end of the bridge would be widened as it transitions back to the existing width of SR-1 and the existing roadway would be realigned to accommodate the new widened bridge. Scope of work will include roadway widening. New curb and gutter will be added to accommodate the roadway transition on either side of the bridge. The bridge deck and approaches would be resurfaced and pavement delineation would be added to accommodate the new widened bridge. One (1) ADA curb ramp would be added at the southwest corner of the Route 1/N. Studebaker Road intersection.

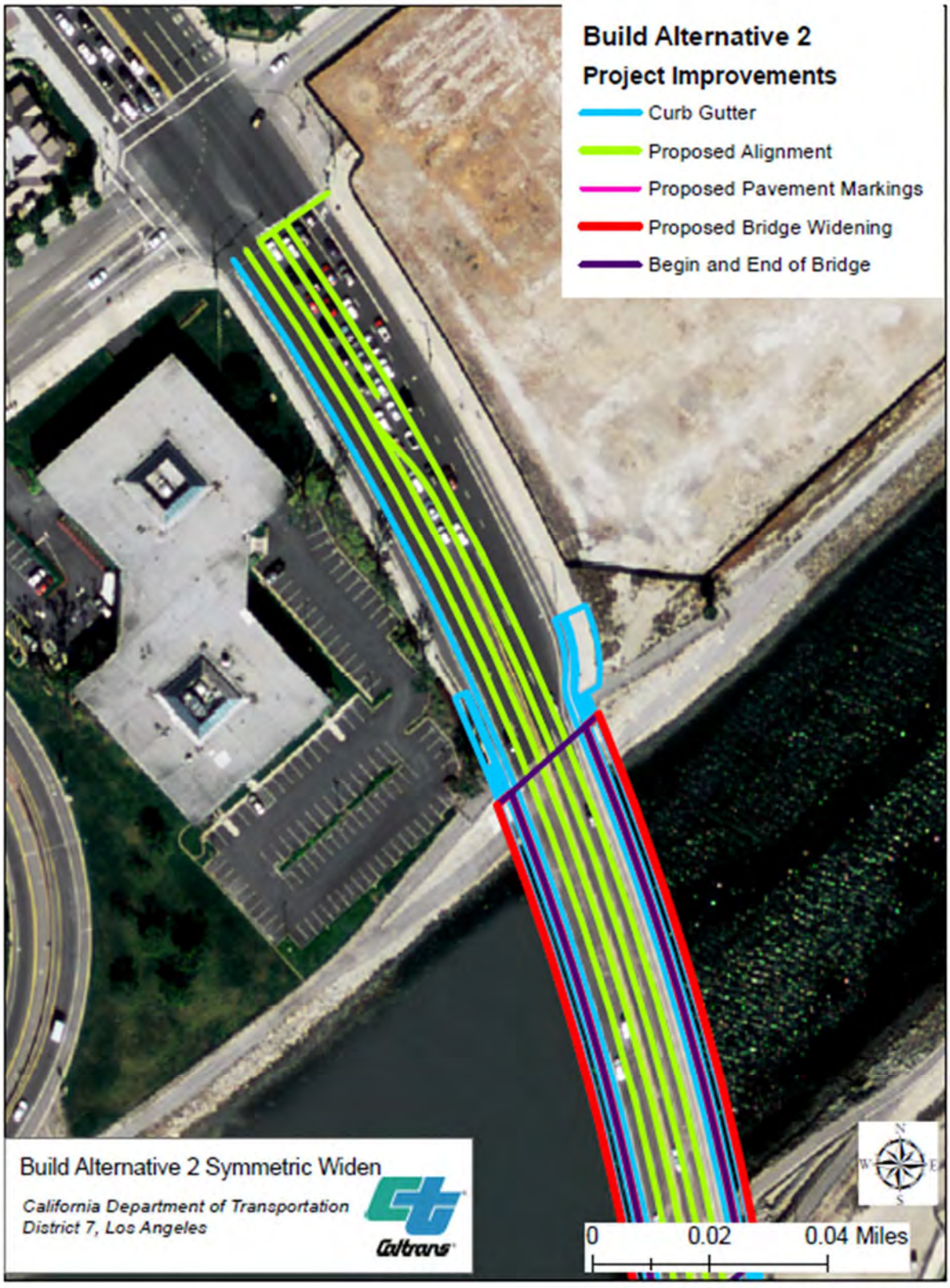
Build Alternative 3 would include the installation of four (4) access road driveway ramps – two (2) access driveway ramps to San Gabriel River Bike Trail at the south end and two (2) access driveway ramps to the maintenance access road at the north end of the bridge. Right of way acquisition is anticipated in addition to Temporary Construction Easements (TCEs). TCEs for construction staging would be required from various property owners to construct the proposed retaining wall for the transition pavement off the bridge. Four (4) existing light poles on the south side of the bridge and three (3) existing light poles on the north side would be relocated.

Utilities under the bridge overhang on the east side of the bridge would be impacted and would have to be relocated. All other utilities would need to be protected in place. Utility relocation and coordination with utility providers is required.

The existing MBGR would be upgraded with concrete barrier and a Manual for Assessing Safety Hardware (MASH) compliant terminal system.

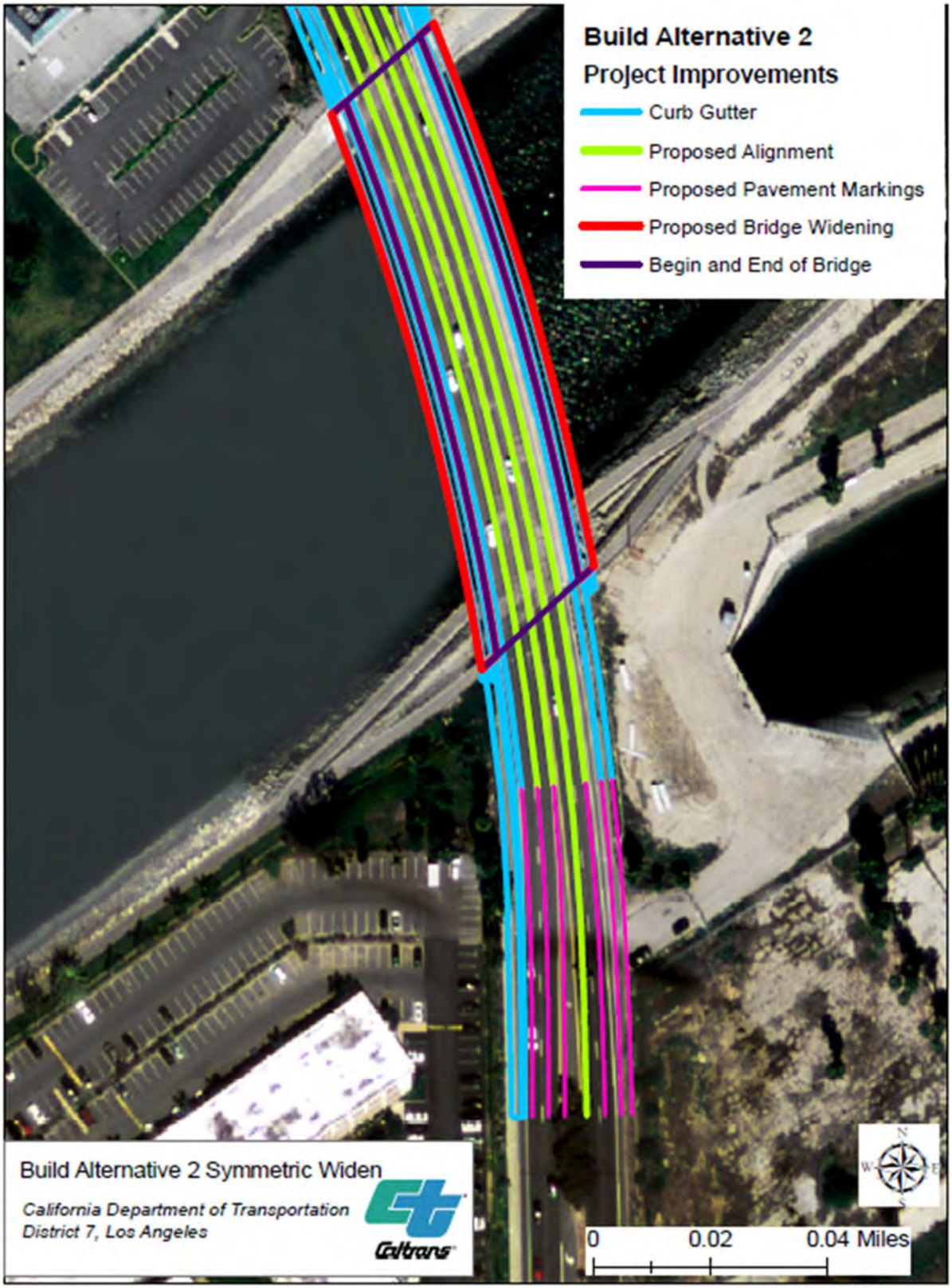
The proposed Build Alternatives can be seen in Figures 1.5-1 and 1.5-2, which show the project area. Figure 1.5-3 shows a Concrete Barrier Type 80 that is similar to those approved for past projects in the Coastal Zone.

Figure 1.5-1 Build Alternative 2 Symmetric Widen A



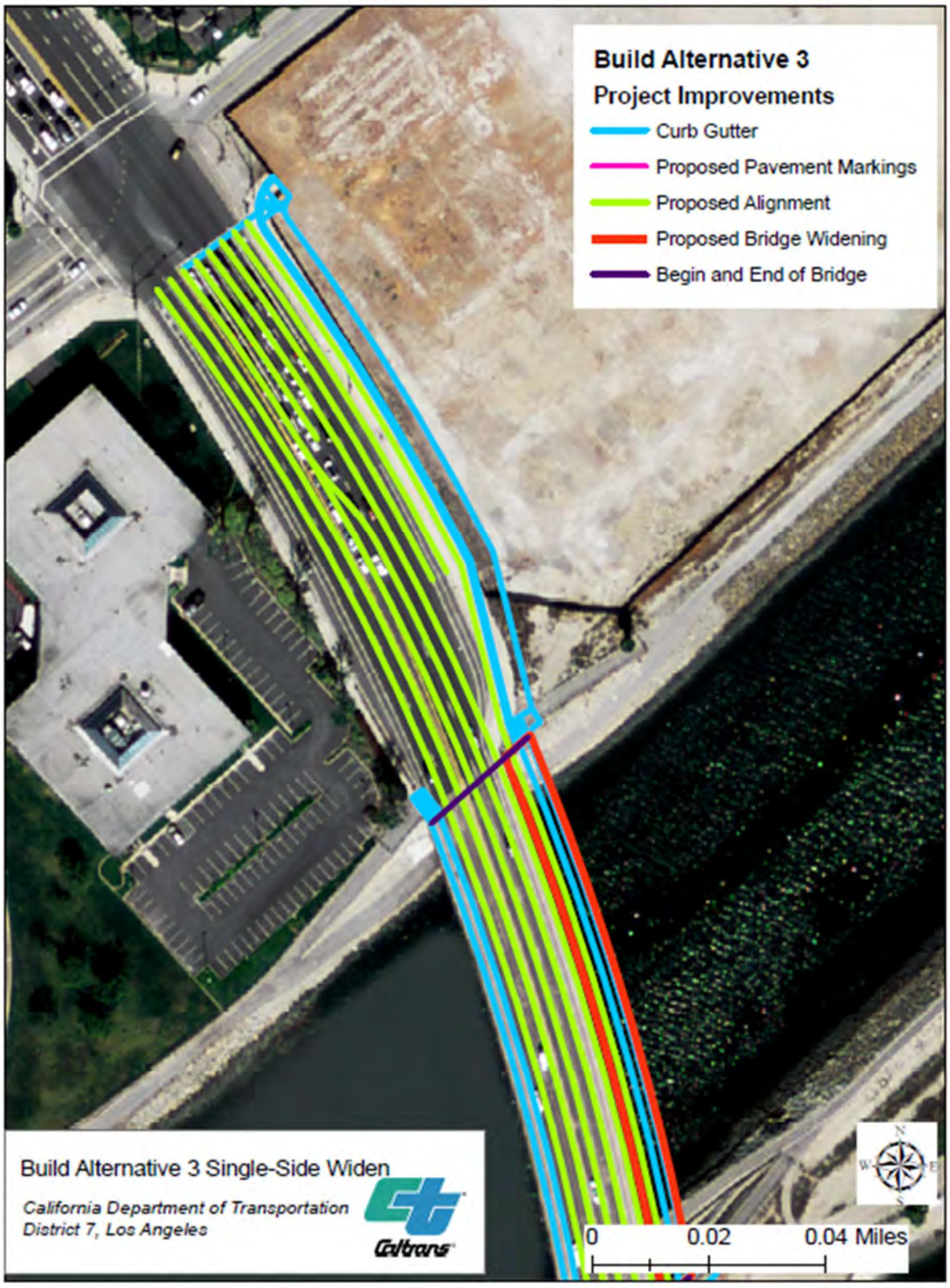
Map created by Rocky Rojas, Division of Environmental Planning, May 5, 2022

Figure 1.5-2 Build Alternative 2 Symmetric Widen B



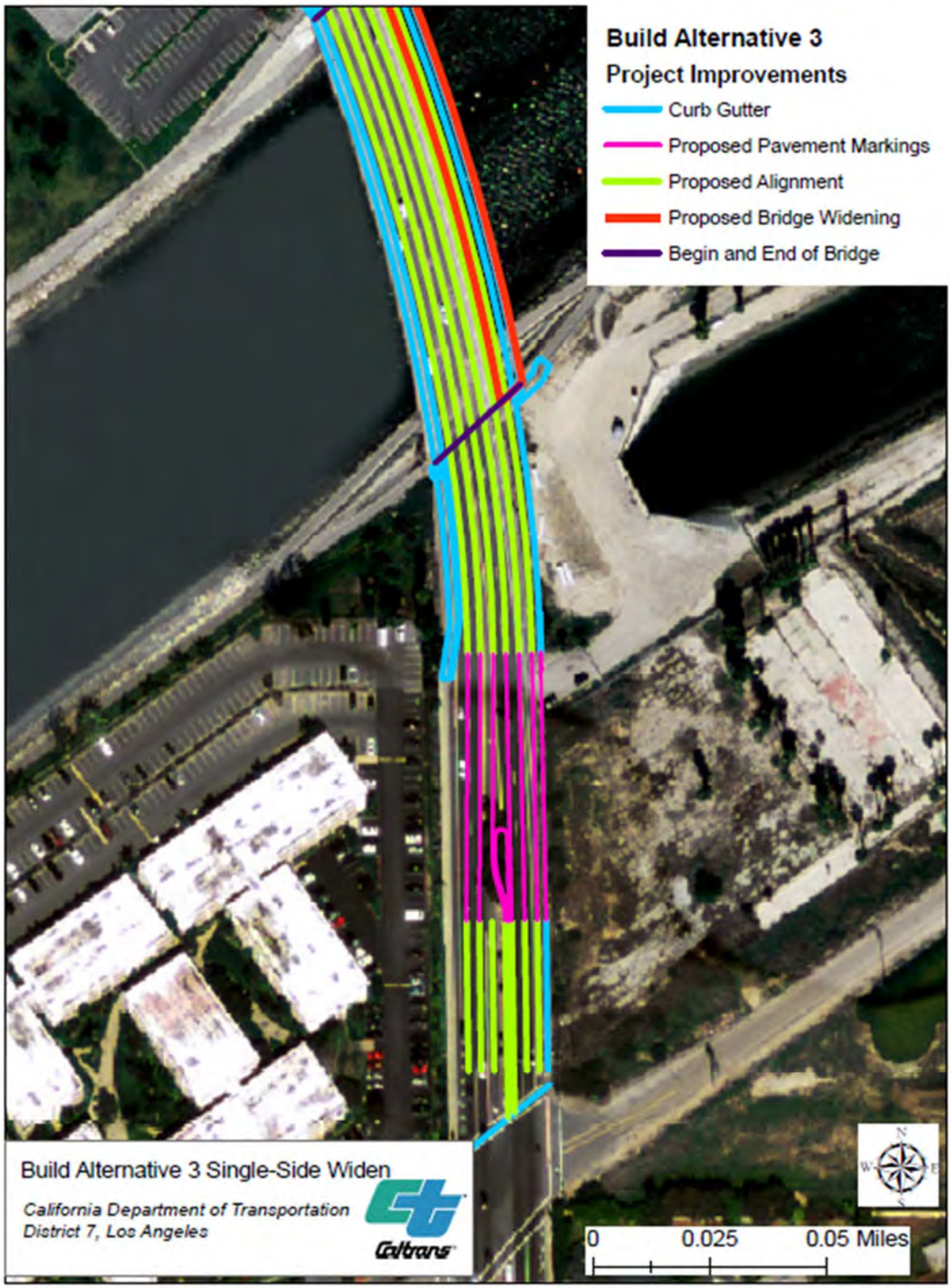
Map created by Rocky Rojas, Division of Environmental Planning, May 5, 2022

Figure 1.5-3 Build Alternative 3 Single Side Widen A (Preferred Alternative)



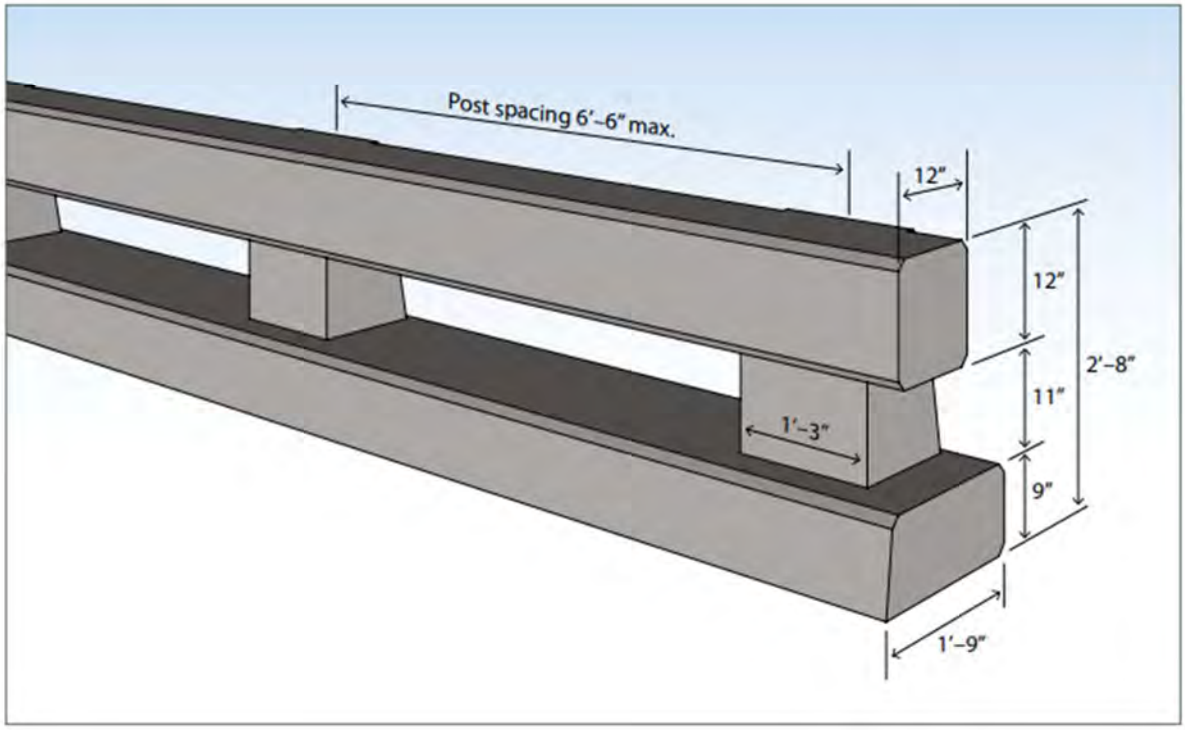
Map created by Rocky Rojas, Division of Environmental Planning, May 5, 2022

Figure 1.5-4 Build Alternative 3 Single-Side Widen B (Preferred Alternative)



Map created by Rocky Rojas, Division of Environmental Planning, May 5, 2022

Figure 1.5-5 Concrete Barrier Type 80



Common Design Features of the Build Alternatives

Project Features

Each Build Alternative includes the following standardized measures that are included as part of the project description. Standardized measures (such as Best Management Practices [BMPs]) are those measures that are generally applied to most or all Caltrans projects. These standardized or pre-existing measures allow little discretion regarding their implementation. They were not developed in response to any specific environmental impact resulting from the proposed project nor are they specific to the circumstances of a particular project. More information on each measure can be found in the applicable sections of Chapter 2.

PF-UES-1: Utility relocation plans shall be prepared in consultation with the affected utility providers/owners for those utilities that will need to be relocated, removed, or protected in-place.

PF-UES-2: All temporary ramp and arterial roadway closures and detour plans will be coordinated with law enforcement, fire protection, and emergency medical service providers.

PF-T-1: A Final Transportation Management Plan (TMP) shall be developed in detail during final design.

PF-VIS-1: All areas disturbed by the proposed roadway improvements or grading operations shall receive replacement planting where feasible.

PF-CUL-1: If cultural materials are discovered during site preparation, grading, or excavation, the construction Contractor would divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find. At that time, there would be coordination with the appropriate local agency.

PF-CUL-2: If human remains are discovered during site preparation, grading, or excavation, California State Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the Los Angeles County Coroner shall be contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Claudia Harbert, Caltrans District 7 Native American Coordinator, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

PF-WQ-1: The proposed project will comply with the provisions of the Caltrans National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit (Order No. 2012-0011-DWQ, as amended by Order WQ 2014-0006-EXEC, Order WQ 2014-0077-DWQ, and order WQ 2015-0036-EXEC, NPDES No. CAS000003) and the NPDES General Permit for Storm Water Discharges of Storm Water Runoff Associated with Construction Activities (Order No. 2009-0009-DWQ, as amended by 2012-0006-DWQ), and any subsequent permits in effect at the time of construction.

PF-WQ-2: A Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) shall be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential to impact water quality. The SWPPP or WPCP hall be prepared per the requirements

stated in the NPDES General Permit for Storm Water Discharges of Stormwater Runoff Associated with Construction Activities and any subsequent permit in effect at the time of construction. The SWPPP or WPCP shall identify the sources of pollutants that may affect the quality of storm water and include the construction site BMPs to control pollutants such as sediment control, catch basin inlet protection, construction materials management and non-stormwater BMPs. All construction site BMPs shall follow the latest editions of the Caltrans Project Planning and Design Guide (PPDG) (2019) and Caltrans Construction Manual (2020). These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-stormwater BMPs.

PF-WQ-3: Caltrans-approved Design Pollution Prevention BMPs shall be implemented to the maximum extent practicable (MEP), consistent with the requirements of the Caltrans Permit.

PF-WQ-4: Caltrans-approved Treatment BMPs shall be implemented to the maximum extent possible (MEP), consistent with the requirements of the Caltrans Permit.

PF-GEO-1: Revegetation of graded slopes should be performed to minimize erosion, and runoff should be diverted from each slope face using earthen berms and/or concrete swales at the top of each slope.

PF-HAZ-1: Site investigations performed at the properties for the Project will be completed during the Plans, Specifications, and Estimates (PS&E) phase to determine whether more extensive subsurface investigation will be needed.

PF-HAZ-2: If hazardous materials contamination or sources are suspected or identified during Project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action, consistent with the Unknown Hazards Procedures in Chapter 7 of the *Caltrans Construction Manual* (2020). Adequate protection to construction workers will be provided with the implementation of a Health and Safety Plan and Soil Management Plan.

PF-HAZ-3: If hazardous materials are discovered, the construction contractor will remove and properly dispose of any materials in accordance with the Caltrans Construction Manual (2020), Chapter 7, Section 7-107, Hazardous Waste and Contamination.

PF-HAZ-4: A Lead Compliance Plan shall be prepared prior to the start of construction activities.

PF-AQ-1: Excessive fugitive dust emissions will be controlled by regular watering or other dust preventive measures, as specified in the South Coast Air Quality Management District (SCAQMD) Rule 403.

PF-AQ-2: Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.

PF-AQ-3: All trucks that are to haul excavated or graded material on site will comply with California Vehicle Code Section 23114, with special attention to Sections 23114(b)(F),(e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.

PF-AQ-4: The Caltrans Standard Specifications for Construction (2018), Section 14.9 must be adhered to. Section 14-9 includes specifications relating to air quality. Section

14-9.02 requires compliance with air-pollution-control rules, regulations, ordinances, and statutes that apply to work performed under the Contract, including those provided in Govt Code § 11017 (Pub Cont Code § 10231).

PF-AQ-5: If naturally occurring asbestos, serpentinite, or ultramafic rock is discovered during grading operations, Section 93105, Title 17 of the California Code of Regulations requires notification to the South Coast Air Quality Control Board by the next business day and implementation of dust control measures described in Section 93105 (d)(B).

PF-AQ-6: All construction vehicles both on and off site shall be prohibited from idling in excess of 5 minutes.

PF-NOI-1: The control of noise from construction activities shall conform to the Caltrans Standard Specifications, Section 14-8.02, “Noise Control”.

PF-BIO-1: If an active nest of any species listed pursuant to the federal or California Endangered Species Act, California bird species of special concern, or a wading bird (herons or egrets) as well as owls or raptors is found, construction activities shall avoid breeding/nesting season (February through September). If construction is determined to be necessary during the breeding/nesting season, construction activities within 300 feet (500 feet for any owl or raptor nests) shall not exceed noise levels of 65 dB peak until the nest(s) is naturally vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. The 65 dB peak noise levels may only be increased if a noise study demonstrates the ambient noise level is above 65 dB at the subject site and shall not be allowed to exceed the ambient level. When construction is determined to be necessary during the breeding/nesting season, bird surveys shall be conducted by a qualified biologist at least 30 days prior to commencement of construction with a follow-up survey conducted 3 days prior to commencement of construction on sites where there is probably cause to believe that nesting birds may exist. Should nesting birds be found, an exclusionary buffer will be established by the biologist.

PF-BIO-2: The construction contractor shall inspect and clean construction equipment at the beginning of each day and prior to transporting equipment from one Project location to another. Any plants removed, or soil disturbed during the course of construction should be contained and properly disposes of offsite. All mulch, topsoil, seed mixes, or other plantings used during landscaping activities and erosion-control BMPs implemented will be free of invasive plant species seeds or propagules listed in the California Invasive Plant Council (Cal-IPC) inventory. City tree planting and removal requirements will also be adhered to.

Unique Features of Build Alternatives

Alternative 2-Build Alternative- Symmetric Widen

The existing utilities under the existing bridge overhang on either side of the bridge will be impacted. The existing vertical clearance across the width of the San Gabriel River bike path is approximately 8 feet. Build Alternative 2 proposes to minimally reduce the vertical clearance on the southbound side between the bridge and the bike path by 0.18 feet (2.16 inches), to less than 8 feet. However, the proposed superelevation would increase the vertical clearance by 4.2

inches on the northbound side of the bridge Additionally, there may be opportunity to regain the 0.18 feet decrease in vertical clearance by relocating the existing utilities under the bridge on the southbound side.

Build Alternative 2 would require the relocation of eight (8) utilities in the Project limit due to placement conflicts with the proposed improvements, or proximity to proposed improvements and requirements for clearance distances. Utilities that would require relocation for this Build Alternative include four (4) gas lines and three (3) oil lines.

Safe passage of pedestrians and bikes will be maintained during construction through the use of a protective canopy over the bike path. The bike path will need to be temporarily closed for the installation of the canopy, bridge demolition trestle platform installation, and for any other safety related issues. These closures will be limited to a few days at a time or less. Advance notice of the closures will be posted and detours will be provided, as outlined the Transportation Management Plan (TMP) prepared for this project.

Additional right of way acquisitions outside of State right-of-way would be necessary. Eleven (11) Temporary Construction Easements (TCEs) are required. The TCEs would not result in the relocations of any businesses or residences.

Alternative 3-Build Alternative- Single Side Widen

The existing utilities under the bridge overhang on the east side of the bridge will be impacted and will have to be relocated. All other utilities will have to be protected in place. There would be no change in clearance between the bridge and the San Gabriel River bike path on the southbound side and utilities would remain in place. There may be opportunity to gain approximately 0.35’ (4.2”) of clearance on the northbound side.

Build Alternative 3 would require the relocation of three (3) utilities in the Project limits due to placement conflicts with the proposed improvements, or proximity to proposed improvements and requirements for clearance distances. Utilities that would require relocation for this Build Alternative include one (1) gas line and two (2) oil lines.

Safe passage of pedestrians and bikes will be maintained during construction through the use of a protective canopy over the bike path. The bike path will need to be temporarily closed for the installation of the canopy, bridge demolition trestle platform installation, and for any other safety related issues. These closures will be limited to a few days at a time or less. Advance notice of the closures will be posted and detours will be provided, as outlined in the TMP prepared for this project.

Additional right of way acquisitions outside State right-of-way would be necessary. Five (5) partial easement acquisitions and nine (9) TCEs are required. The easements and acquisitions would not result in the relocations of any businesses or residences.

Identification of Preferred Alternative

The Preferred Alternative was identified after considering all information in the IS/EA and supporting technical studies. It was also based on input from the Project Development Team (PDT) members, public stakeholders, and federal, State, and local agencies during the project development process. Consideration was given to all issues raised during the public circulation period. This public outreach and coordination resulted in comments from the public and government agencies, all of which were carefully considered during the Preferred Alternative selection process. After comparing and weighing the benefits and impacts of the Build

Alternatives and No Build Alternative, the PDT has identified Build Alternative 3 as the Preferred Alternative.

The project was initiated to upgrade the bridge railing width to current standards. The Preferred Alternative meets the purpose and need.

Deciding Factors in the Identification of the Preferred Alternative

The following factors will go over the factors for supporting the Preferred Alternative. Please note the following list does not represent the order of important associated with the selection of the Preferred Alternative.

Economic and Fiscal Factors

The escalated capital outlay (Construction Outlay and Right of Way) cost for Build Alternative 2-Symmetric Widen is $38,371,000 as compared to Build Alternative 3-Single Side Widen at $31,745,000. The higher cost for Build Alternative 2 is primarily due to increased Right-of-Way costs for utility relocation on the southbound side of the bridge. The lower cost of Build Alternative 3 makes the Preferred Alternative the more desirable and cost-effective option between the two Build Alternatives.

Future Projects Involving the Project Site

When the existing bridge needs to be replaced in the future, the newly widened portion of the bridge (24 feet on the east side, as noted in the scope for The Preferred Alternative) can be used as a temporary bridge for traffic handling at that time.

Construction Duration and Methods

The Preferred Alternative (Build Alternative 3) has a shorter duration for construction stage 2 since no bridge widening is involved in the 2nd stage. This will reduce inconvenience to the public. Additionally, the Preferred Alternative will not reduce the existing vertical clearance over the San Gabriel River Bike Path, whereas Build Alternative 2 will reduce the existing vertical clearance.

Alternatives Considered but Eliminated from Further Discussion Prior to the Draft Initial Study/Environmental Assessment

During an earlier phase of this Project, Caltrans considered a minimum build alternative to specifically upgrade the existing bridge railing. However, the Design team could not justifiably approve the minimum build alternative while maintaining existing nonstandard features on the bridge including the median, shoulder, and sidewalk. The cost/benefit analysis for this minimum build alternative was not acceptable, given that it would require extensive utility relocation. Improving safety is a top priority of Caltrans, and it was deemed necessary to evaluate the full standard bridge cross section design in lieu of the minimum build alternative.

Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives

Although Transportation System Management measures alone could not satisfy the purpose and need of the project, the following System Management measure(s) have been incorporated into the Build Alternatives for this project:

- Implementation of Complete Streets elements including pedestrian walkways, wider shared shoulder/bike lanes, and Americans with Disabilities Act (ADA) compliant curb ramps.

Reversible Lanes

Assembly Bill 2542 amended California Streets and Highways code to require, effective January 1, 2017, that Caltrans or a regional transportation planning agency demonstrate that reversible lanes were considered when submitting a capacity-increasing project or a major street or highway lane realignment project to the California Transportation Commission for approval (California Streets and Highways Code, Section 100.015).

The proposed Project is a bridge rail upgrade and widen project is not a capacity-increasing or a major street or highway lane realignment project. Therefore, consideration of reversible lanes is not applicable for this project. The purpose of this project is to enhance safety and mobility for all users by eliminating nonstandard design features. Implementing a reversible lane would require SR-1 to become a one-way street during peak hours. The traffic volumes within the project limits are not heavily imbalanced during the peak travel period. Therefore, reversible lanes are not required and not proposed as part of this project.

1.6 Permits and Approvals Needed

Table 1.6-1 lists the permits, licenses, agreements, and certifications (PLACs) that are required for Project Construction.

Agency	PLAC	Status
U.S. Army Corps of Engineers	• Clean Water Act Section 404 • Clean Water Act Section 408 • Rivers and Harbors Act of 1899 Section 10	Application for Sections 404 and 408 permits and Rivers and Harbors Act Section 10 permit expected after Final Environmental Document (FED) approval
California Department of Fish and Wildlife	• California Fish and Game Code Section 1602 (Lake or streambed alteration agreement)	Application for 1602 permit expected after FED approval
State Water Resource Control Board (SWRCB)	• National Pollutant Discharge Elimination System (NPDES) Permit • Construction General Permit • Dewatering Permit	General discharge permit to be obtained prior to construction; all NPDES permits have already been issued by SWRCB and only require notification of implementation (CAS000002)
Regional Water Quality Control Board	• Clean Water Act Section 401 (Water Quality Certification) • Storm Water Permit • National Pollutant Discharge Elimination System (NPDES) Permit	Application for Clean Water Act Section 401 and Storm Water permit expected after FED; all NPDES permits have already been issued by SWRCB and only require notification of implementation (CAS000002)
California Coastal Commission and/or Local Coastal Program	• Coastal Development Permit	Application for permit expected after FED approval
Los Angeles County Flood Control District	• Flood Control Permit	Application for permit expected after FED approval
U.S. Coast Guard	• Rivers and Harbors Act of 1899 Section 9 (Bridge Permit)	Application for permit expected after FED approval
California State Lands Commission	• California Public Resources Code Division 6 • Permit	Application for permit expected after FED approval

Chapter 2 – Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

This chapter discusses project impacts on the human, physical, and biological environment within the study area defined for each environmental resource. Analysis of each environmental factor includes a discussion of the affected environment, potential environmental impacts, and any avoidance, minimization, and mitigation measures for the Build Alternative and the No Build Alternative.

TOPICS CONSIDERED BUT DETERMINED NOT TO BE RELEVANT

As part of the scoping and environmental analysis carried out for the project, the following environmental issues were considered but no adverse impacts were identified. As a result, there is no further discussion about these issues in this document.

- **Wildfire-** The project is not located within or near a very high fire hazard severity zone. There is no potential for adverse fire hazard impacts.

- **Farmlands/Timberlands**- In general, the study area is composed largely of urban and built-up, water area, or other land (which denotes vacant or nonagricultural land surrounded on all sides by urban development). According to the Farmland Mapping and Monitoring Program (FMMP) (California Department of Conservation 2016), no FMMP farmland is designated within the study area. Land within the study area does not serve an agricultural purpose. There are no farmlands that could potentially be affected by the proposed Project. There are no Williamson Act contract lands nor Timberland Production Zones within the Project area. There are no adverse impacts to farmland or timberland anticipated.

- **Wild and Scenic Rivers**- The project limits are not near any wild and scenic rivers; therefore, no adverse impacts are anticipated.

- **Growth**- The project does not propose to modify existing highway capacity, operation, or accessibility. The project has no capacity to influence growth.

2.1 Human Environment

2.1.1 Land Use

2.1.1.1 EXISTING AND FUTURE LAND USE

This section describes the existing land uses in the project area, characterizes surrounding uses, and summarizes current planning activities in the project area. This analysis focuses on the land use compatibility and impacts associated with the implementation of the project.

Affected Environment

The proposed Project is located along State Route 1 (Pacific Coast Highway) between North Studebaker Road and 1st Street. The proposed Project is located in both the City of Long Beach (in Los Angeles County) and the City of Seal Beach (in Orange County). The northwest and northeast quadrants, and a portion of the southeast quadrant of the project site are located within the City of Long Beach. The southwest quadrant and a portion of the southeast quadrant of the project area are located within the City of Seal Beach. These designations can be seen in Figure 2.1-1 City/County Boundaries.

State Route 1 runs in an west-east direction in the Project area and connects the City of Long Beach to the City of Seal Beach over the San Gabriel River Channel. State Route 1 consists of two lanes in each direction at the proposed Project location. There are currently no designated bicycle lanes within the Project limits. The shoulder and bicycle lane are shared. There are currently 5 foot sidewalks along State Route 1 within the project limits. The proposed project will incorporate a 187 foot sidewalk on the southeast end of the bridge, to close a gap in the pedestrian walkway.

The proposed project setting is characterized by commercial and office building uses, as well as vacant land area to the northwest and northeast, established residential area to the southwest and commercial and vacant land to the southeast. A parking lot and financial services office buildings are located directly northwest of the project site along State Route 1. Directly to the northeast of the project area along State Route 1 is vacant land area. On the southwest side of the project site along State Route 1 are multi-family residences. Lastly, directly to the southeast side of the project area is vacant land.

Further northwest of N. Studebaker Road is additional waterfront parking and commercial buildings. The northern portion of the Project area is designated as “Regional-Serving Facility”, by the City of Long Beach General Plan (2019).

Figure 2.1-1 City/County Boundaries

Data Source: OC Public Works, Los Angeles County GIS Hub

Map created by Rocky Rojas, Division of Environmental Planning, February 8, 2022

Table 2.1-1 and Table 2.1-2 shows the land uses and zoning designations of the City of Long Beach and the City of Seal Beach in the proposed Project area. These are shown graphically in Figures 2.1-2 (Land Use) and 2.1-3 (Zoning).

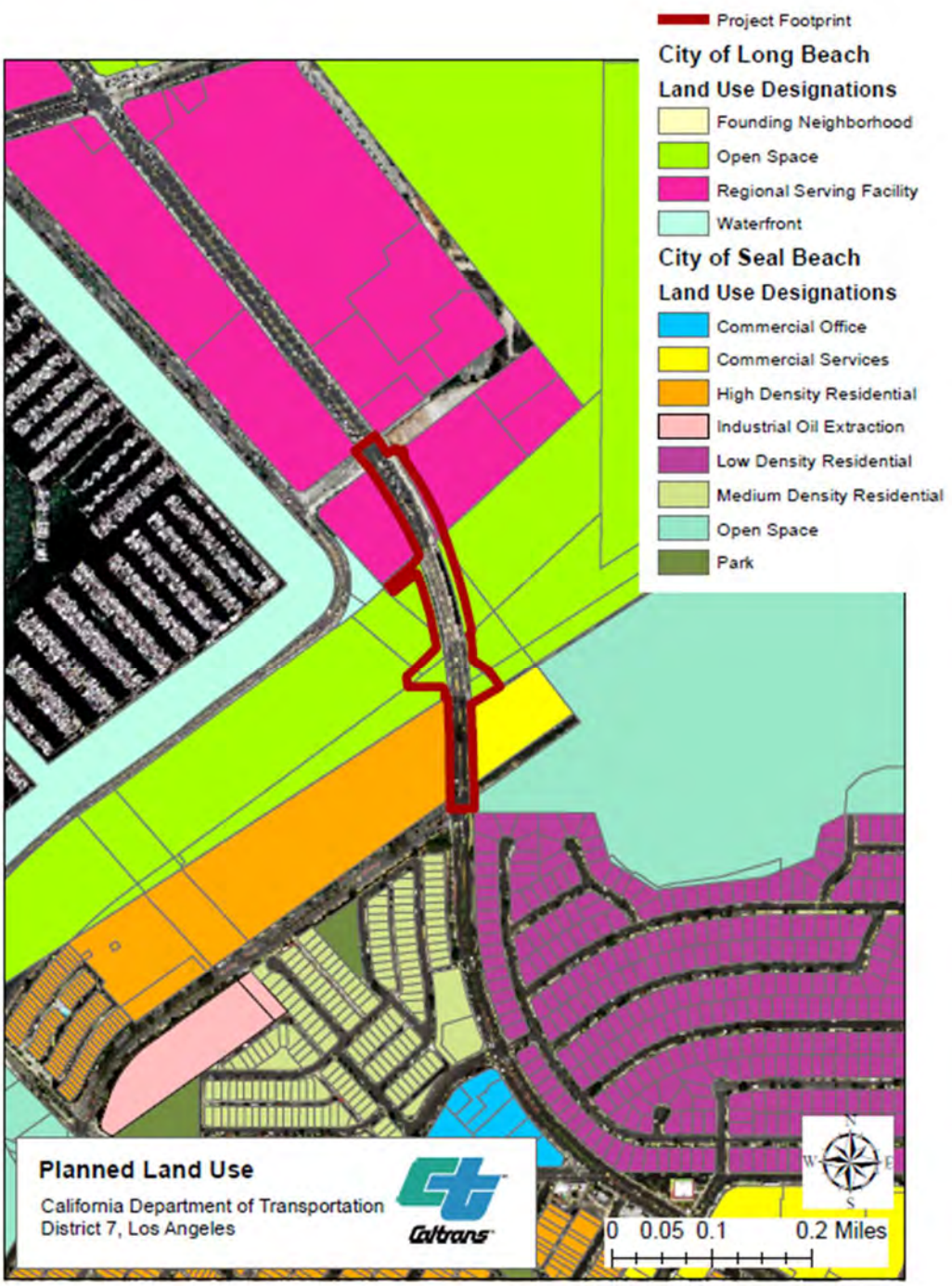
Table 2.1-1 Land Use Designations

SR-1 San Gabriel River Bridge Project Site	City of Long Beach Land Use	City of Seal Beach Land Use
Northwest side	Regional Serving Facility (RSF)	–
Northeast side	Regional Serving Facility (RSF)	–
Southwest side	Open Space (OS)	Multi-Family Residential
Southeast side	Open Space (OS)	Commercial and Services

Table 2.1-2 Zoning Classification

SR-1 San Gabriel River Bridge Project Site	City of Long Beach Zoning	City of Seal Beach Zoning
Northwest side	Specific Plan (SP)	–
Northeast side	Specific Plan (SP)	–
Southwest side	Specific Plan (SP)	Residential High Density- 33
Southeast side	–	Specific Plan Regulation (SPR)- State Lands Specific Plan

Figure 2.1-2 Land Use



Data source: SCAG GIS Open Data Portal

Figure 2.1-3 Zoning

Data Source: SCAG GIS Open Data Portal

Development Trends

The City of Seal Beach has identified two pending development applications within a 0.5-mile buffer area surrounding the proposed project. One pending development proposes a gas station with a convenience store at 490 Pacific Coast Highway, well outside of the Project footprint. The other development project, the Hellman Ranch Gas Plant, proposes a new gas plant on a 16,117 "puzzle-shaped" parcel near 1st Street and Pacific Coast Highway. This proposed gas plant is directly adjacent to the southeastern side of Project footprint.

There are a number of large-scale projects that have been recently approved or are being processed by Caltrans, OCTA, LADWP, Los Cerritos Wetlands Authority, The City of Long Beach, and The City of Seal Beach. Table 2.1-3 identifies these larger scale developments near the Project study area.

Table 2.1-3 Major Development/Transportation Projects near the Project Study Area

Number	Project Title	Project Description	Lead Agency	Project Status
Development Projects				
1	AES Battery Buildings	300-megawatt battery energy storage facility consisting of three 50-foot-high buildings.	City of Long Beach	Construction completed in 2021, fully operational
2	Haynes Generating Station Unit 8 Recycled Water Cooling System Retrofit Project	The Los Angeles Department of Water and Power (LADWP) proposes to modify the Haynes Generation Unit 8 cooling system by removing the existing ocean-water once-through cooling (OTC) system from service and installing a wet cooling system consisting of a cooling tower.	Los Angeles Department of Water and Power (LADWP)	Draft Initial Study/MND Prepared November 2021

Number	Project Title	Project Description	Lead Agency	Project Status
Development Projects				
3	Los Cerritos Wetlands Restoration Plan	Restore wetland and upland habitats throughout the program area. This would involve remediation of contaminated soil, grading, re-vegetation, construction of new public access opportunities (including trails, visitor centers, parking lots, and viewpoints), construction of flood management facilities (including earthen levees and berms, and walls), and modification of existing infrastructure and utilities.	Los Cerritos Wetlands Authority	EIR prepared September 2020, NOD signed January 2021
4	Anaheim Street and Walnut Avenue Development Project	The project consists of a new 116,356 sf, mixed use building. The building includes an 88 unit, 5-story apartment building, with 93,656 sf of residential space on levels two through five and 22,700 sf on the street level, which includes 18,136 sf of medical clinic space, 1,100 sf of commercial office space, 1,200 sf of residential leasing office space, and 2,264 sf of recreation and lobby space. The building also includes a 3-story, 156 stall parking structure with partial 4th floor outdoor terrace for a total of 116,356 square feet of building area and 81,903 square feet of parking garage, on a 1.54 acre site. The project consists of 100 percent affordable housing units.	City of Long Beach	IS/MND approved August 2019

Number	Project Title	Project Description	Lead Agency	Project Status
Development Projects				
5	300 Studebaker Road Industrial Park Project	The project involves the demolition of 400 square feet (sf} of existing concrete, on-site pipeline structures, and asphalt paving, and the development of two concrete tilt-up industrial buildings, situated on 6.69 acres of land east of Studebaker Road. The project would include planting of an assortment of native grasses and tree species consistent with the Los Cerritos Wetlands Authority, including low growing grasses along street frontage. Situated within the eastern project area, the two 35-foot high buildings would total 139,200 sf, including 21,000 sf office space.	City of Long Beach	IS/MND approved November 2019
6	490 Pacific Coast Highway (Gas Station with Convenience Store)	The proposed gas station will involve the installation of 16 gas pump dispensers and the construction of an approximately 2,400 square foot convenience store. The site was previously a gas station that was demolished in 2011. The site has been an active environmental remediation area (with operating groundwater and soil vaper recovery systems) since 1986to remove leaked gasoline from the previous gas station.	The City of Seal Beach	The 30-day public comment period for this item concluded on December 23, 2020. However, the project is still under review. The Seal Beach Planning Commission is to consider the project next. However, a meeting date has yet to be scheduled at this time.

Number	Project Title	Project Description	Lead Agency	Project Status
Development Projects				
7	Hellman Ranch Gas Plant	The Project proposes to construct a new gas plant on a 16,117 square foot, "puzzle-shaped" parcel (or a .37 acres site). The proposed gas plant will involve the construction of approximately 12 pieces of equipment including but not limited to compressors, transformers and tanks of various sizes. The Project will be located near existing equipment similarly used for oil and gas production facilities, and is located on one of several parcels, totaling approximately 57 acres, that is owned by Hellman Properties, and upon which oil and gas production facilities are currently operated.	The City of Seal Beach	The 30-day public comment period for the environmental documents has concluded. The Seal Beach Environmental Quality Control Board (EQCB) met regarding this matter on September 23, 2020. The applicant requested additional time to consider the comments received. As a result, the processing of the entitlement and associated environmental document are currently on hold.
Transportation Projects				
8	2nd Street Bike Path	Reduction of existing medians to accommodate Class II bike lanes both westbound and eastbound. Improves ADA accessibility and safety for cyclists.	City of Long Beach	Construction completed February 2020.
9	I-605/Katella Avenue Interchange Project	Enhance freeway access and arterial connection, traffic operations, as well as improve overall safety at the interchange.	OCTA, in cooperation with Caltrans	The Environmental Phase of the project has been completed. Construction will take place during 2023-2025.

Number	Project Title	Project Description	Lead Agency	Project Status
Transportation Projects				
10	West County Connectors I-405, SR-22, and I-605	Links high occupancy vehicle (HOV) lanes on the San Diego Freeway (I-405) with those on the Garden Grove Freeway (SR-22) and San Gabriel River Freeway (I-605) to create seamless carpool connection among the three freeways.	OCTA, in cooperation with Caltrans	East and West segments completed construction in March 2015.
11	I-405 Improvement Project	Widening the San Diego Freeway (I-405) between the SR-73 in Costa Mesa and I-605 near the L.A. County line.	OCTA, in cooperation with Caltrans	Work has begun along the 16-mile stretch. The project is anticipated to be completed in 2023.
12	I-405 at San Gabriel River Bridge Scour Mitigation Project	The California Department of Transportation (Caltrans) proposes a bridge scour maintenance project at the Interstate 405 (I-405) / Interstate 605 (I-605) interchange - a complex of three (3) bridges that traverse the San Gabriel River at the Los Angeles County/Orange County line. The scope of work for all three bridges includes 1) retrofit of bridge substructure foundation by constructing pier footing extensions at Pier 3 and Pier 4 at each bridge, 2) reinforcement of new footing extensions through placement of new Cast-In-Drilled-Hole (CIDH) piles, and 3) armoring of substructure retrofit through placement of rip-rap/rock protection around each pier.	Caltrans, District 7	IS/EA with ND/FONSI approved March 2020

Environmental Consequences

No Build Alternative

The No Build Alternative would not convert any existing land uses to transportation uses, nor would it have direct effects on land uses in the project area. Furthermore, the location, characteristics, and uses of existing transportation facilities generally would not change.

Build Alternative 2

Build Alternative 2 would require eleven (11) Temporary Construction Easements (TCEs). The TCEs would not result in the relocations of businesses or residences. See Table 2.1-12 for a summary of impacted properties in Section 2.1.2.2 Relocation and Property Acquisition. No changes to City or County land use designations would occur. The proposed Project would not prevent the City of County from developing their future land use plans. Project implementation would not divide neighborhoods or cut off any dependent land uses from each other. Thus, there would be no impacts related to land use or planning.

Build Alternative 3 (Preferred Alternative)

Build Alternative 3 would require five (5) partial easements and nine (9) TCEs. The easements and TCEs would not result in the relocations of businesses or residences. On the northeastern side of the project limits, the permanent easement to be acquired from Lyon Housing would remain in alignment with the goals of the Regional-Serving Facility (RSF) placetype, by providing transportation improvements that benefit the surrounding and broader community. On the east side of the project limits, the permanent easement to be acquired from the Alamitos Bay Partnership LLC would acquire land that is currently designated as Open Space (OS). The impact of acquiring this easement compared to the current use of the land would be less than significant and would not impede the goals of the City of Long Beach's general plan for this area. On the southeastern side of the proposed Project, the permanent easement to be acquired from the L.A. City Department of Water and Power would acquire land that is currently designated as Open Space. The impact of acquiring this easement compared to the current use of the land would be less than significant and would not impede the goals of the City of Long Beach's general plan for this area.

The remaining permanent easements to be acquired on the southeastern side of the Project site would convert the planned land use from Commercial Services to a transportation use. The area of the easements to be acquired by the State is relatively small (147 square feet, 218 square feet, and 442 square feet) and would not hinder the overall goals of the City of Seal Beach's land use plan. The impact would be less than significant.

Project implementation would not divide neighborhoods or cut off any dependent land uses from each other. Thus, there would be less than significant impacts related to land use or planning.

Avoidance, Minimization and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

No avoidance, minimization, or mitigation measures are required.

2.1.1.2 CONSISTENCY WITH STATE, REGIONAL, AND LOCAL PLANS

The proposed Project is located within the City of Long Beach, City of Seal Beach, Los Angeles County, and Orange County. These jurisdictions manage development through policy guidance in their respective planning documents, including general plans and zoning classifications. State law requires that city general plans be in conformance with county plans.

Affected Environment

Applicable State and Regional Plans

2019 Federal Transportation Improvement Program

The proposed project is currently included in Amendment #19-30 of the Southern California Association of Government (SCAG) financially constrained 2019 Federal Transportation Improvement Program (FTIP), which includes all federally funded and regionally significant projects in the 6-county SCAG planning region (SCAG, 2020). The proposed project is registered as LALS04 in Amendment #19-30 of the 2019 FTIP. It is defined as, “Route 999: In L.A. Grouped Projects for Bridge Rehabilitation and Reconstruction – SHOPP Program. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories – Widening narrow pavements or reconstructing bridges (no additional travel lanes).”

Southern California Association of Governments 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

SCAG is a metropolitan planning organization representing six counties and 191 cities in Southern California. The SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted on September 3, 2020. The 2020-2045 RTP/SCS includes $68 billion towards preservation, operation, and resiliency needs of the state highway system and $47.5 billion towards preservation, operation, and resiliency needs of the regionally significant local streets and roads.

The 2020-2045 RTP/SCS includes the following regional transportation goals:

- Encourage regional economic prosperity and global competitiveness
- Improve mobility, accessibility, reliability, and travel safety for people and goods
- Enhance the preservation, security, and resilience of the regional transportation system
- Increase person and goods movement and travel choices within the transportation system
- Reduce greenhouse gas emissions and improve air quality
- Support healthy and equitable communities
- Adapt to a changing climate and support an integrated regional development pattern and transportation network
- Leverage new transportation technologies and data-driven solutions that result in more efficient travel
- Encourage development of diverse housing types in areas that are supported by multiple transportation options
- Promote conservation of natural and agricultural lands and restoration of habitats

These goals emphasize SCAG’s priorities to increase mobility options, achieve a more sustainable growth pattern, and to close the gap and reach greenhouse gas reduction goals.

Senate Bill 1 (SB 1)- The Road Repair and Accountability Act of 2017

Approved on April 28th, 2017, SB 1 provides the Road Maintenance and Rehabilitation Program to address deferred maintenance of the state highway system and the local street and road system, through increases, adjusted for inflation, in motor vehicle fuel taxes, vehicle license fees, and registration fees. The Bill is aimed at increasing transportation funding and instituting much-needed reforms. This legislation contains expenditure estimates of $1.9 billion annually for state high maintenance and rehabilitation, including $400 million annually for bridges and culverts.

Los Angeles County General Plan (2035)

The Los Angeles County General Plan provides the long-term physical development and conservation policy framework for the unincorporated areas of Los Angeles County. The unincorporated areas of Los Angeles County account for an estimated 2,650 square miles (more than two-thirds of Los Angeles County's land), with over 1 million people residing in these areas. The 2035 Los Angeles County General Plan was adopted on October 6th, 2015. The 2035 General Plan includes several policies aimed at improving transportation in the county.

Orange County General Plan

The Orange County General Plan provides a policy framework for the unincorporated areas of Orange County. The majority of the unincorporated area is located in the southern portion of the County. The plan contains an introductory chapter, a demographics chapter, and nine other elements including: land use, transportation, public services and facilities, resources, recreation, noise, safety, housing, and growth management. The plan also addresses regional services and facilities provided by the County such as regional parks, roads, and flood control facilities.

City of Long Beach General Plan (2040)

The City of Long Beach General Plan is the principal policy document for guiding future development in the City. The General Plan Land Use Element is designed to promote a multi-faceted planning approach, by guiding use, form, and the characteristics of improvements on the land. The Land Use Element emphasizes complete and healthy neighborhoods by providing for educational, commercial, employment, recreational, civic, healthy food, and housing opportunities for all residents within walking distance of their homes.

The Land Use Element divides the City into 9 different neighborhoods. The proposed Project falls within the Southeast area, which is bordered by the Pacific Ocean on the south and Orange County to the east.

City of Seal Beach General Plan

The General Plan serves as a policy guide for determining the appropriate physical development and character of Seal Beach. The plan is founded upon the community's vision for Seal Beach and expresses the community's long-term goals.

Environmental Consequences

Table 2.1-4 Consistency with Local, Regional, and State Plans

Goals / Objectives / Policies	No Build Alternative	Build Alternative 2	Build Alternative 3
SCAG Regional Transportation Plan/Sustainable Communities Strategy			
Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations.	**Not Consistent**. The No Build Alternative would not enhance mobility or promote complete street elements for all user types.	**Consistent**. Build Alternative 2 would widen existing bridge sidewalks and shoulders to standard, and implement new ADA curb ramps for pedestrians.	**Consistent**. Build Alternative 3 would widen existing bridge sidewalks and shoulders to standard, and implement new ADA curb ramps for pedestrians.
Preserve and maintain our existing, aging infrastructure assets.	**Not Consistent**. The No Build Alternative would not upgrade bridge rail elements.	**Consistent**. Build Alternative 2 would upgrade existing bridge railing to current standard.	**Consistent**. Build Alternative 3 would upgrade existing bridge railing to current standard.

Goals / Objectives / Policies	No Build Alternative	Build Alternative 2	Build Alternative 3
Los Angeles County General Plan			
Policy M 1.1 Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible.	**Not Consistent**. The No Build Alternative does not widen the existing non-standard roadway features, incorporate ADA curb ramps, or add new sidewalk to provide pedestrian sidewalk continuity.	**Consistent**. Build Alternative 2 would widen the existing roadway shoulders and sidewalks to standard, incorporate ADA curbs ramps, and provide new sidewalk at the ends of the bridge to close the gap in pedestrian sidewalk continuity. Wider shoulders and sidewalks will provide increased comfortability and space for pedestrians and bicyclists, enhancing overall safety.	**Consistent**. Build Alternative 3 would widen the existing roadway shoulders and sidewalks to standard, incorporate ADA curbs ramps, and provide new sidewalk at the ends of the bridge to close the gap in pedestrian sidewalk continuity. Wider shoulders and sidewalks will provide increased comfortability and space for pedestrians and bicyclists, enhancing overall safety.
Policy M 2.1 Provide transportation corridors/networks that accommodate pedestrians, equestrians and bicyclists, and reduce motor vehicle accidents through a context-sensitive process that addresses the unique characteristics of urban, suburban, and rural communities whenever appropriate and feasible.			
Policy M 2.4 Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible: a) Designs for curb ramps, which are pedestrian friendly and compliant with the Americans with Disability Act (ADA).			

Goals / Objectives / Policies	No Build Alternative	Build Alternative 2	Build Alternative 3
City of Long Beach General Plan			
LU Policy 11-5 Ensure neighborhoods are accessible to open spaces, parks, trails, and recreational programs that encourage physical activity and walkability.	**Not Consistent**. The No Build Alternative does not provide a connection to the pedestrian/bicycle ramps leading up from the San Gabriel River Channel.	**Consistent**. Build Alternative 2 would add new bridge sidewalk curb ramps to meet the pedestrian/bicycle ramps leading up from the San Gabriel River Channel.	**Consistent**. Build Alternative 3 would add new bridge sidewalk curb ramps to meet the pedestrian/bicycle ramps leading up from the San Gabriel River Channel.
MOP IM-2 Routinely incorporate complete streets features into all street redesign and repaving projects.	**Not Consistent**. The No Build Alternative does not promote complete street elements or improve mobility for all user types. No improvements to sidewalk continuity would be made that would increase safety and mobility for pedestrians. Width of sidewalks and shoulders along the bridge would remain sub-standard.	**Consistent**. Build Alternative 2 incorporates complete street elements such as wider, standard shoulder lanes and sidewalks along SR-1 for increased user mobility. ADA curb ramps will be implemented for increased mobility and safety for pedestrians. A gap in sidewalk continuity will be closed at the ends of the bridge.	**Consistent**. Build Alternative 3 incorporates complete street elements such as wider, standard shoulder lanes and sidewalks along SR-1 for increased user mobility. ADA curb ramps will be implemented for increased mobility and safety for pedestrians. A gap in sidewalk continuity will be closed at the ends of the bridge.
MOP IM-17 Address bicycle safety and access in the design and maintenance of all street projects.			
MOP IM-30 Ensure that all planning processes, such as neighborhood and specific plans, identify areas where pedestrian, bike, and transit improvements can be made, such as new connections, increased sidewalk width, improved crosswalks, improved lighting, and new street furniture.			
MOP IM 32 Routinely integrate the financing, design, and construction of pedestrian facilities with street projects. Build pedestrian improvements at the same time as improvements for vehicular circulation.			

Goals / Objectives / Policies	No Build Alternative	Build Alternative 2	Build Alternative 3
Orange County General Plan			
All land use and transportation improvements are planned, designed, constructed operated and maintained to support safe and convenient access for all users, and increase mobility for walking, bicycling and transit use, wherever possible and appropriate, while promoting safe, efficient and accessible operations for all users.	**Not Consistent**. The No Build Alternative would not promote improved mobility for all users and would not widen roadway features to standard to accommodate safer conditions for pedestrians and bicyclists.	**Consistent**. Build Alternative 2 would incorporate standard 8- foot shoulders and 8-foot sidewalks, providing safer roadway traveling conditions for all user types. New sidewalk at the ends of the bridge will be implemented to close the gap and create pedestrian sidewalk continuity.	**Consistent**. Build Alternative 3 would incorporate standard 8-foot shoulders and 8-foot sidewalks, providing safer roadway traveling conditions for all user types. New sidewalk at the ends of the bridge will be implemented to close the gap and create pedestrian sidewalk continuity.
A transportation system that provides a connected network of facilities accommodating all modes of travel that is integrated with planned land use. Enabling new streets and sidewalks, trails and bike paths to connect to existing streets and sidewalks, trails and bike paths, enabling construction of bus stops and shelters, where appropriate and needed, identifying and filling sidewalk gaps, promoting walkability, and looking for opportunities to repurpose public and private rights-of-way to enhance connectivity for cyclists, pedestrians, and transit users.			

Goals / Objectives / Policies	No Build Alternative	Build Alternative 2	Build Alternative 3
City of Seal Beach General Plan			
Maintain circulation system standards for roadways and intersection classifications, right-of-way width, pavement width, design speed, capacity, maximum grades, and associated features such as medians and bicycle lanes.	**Not Consistent**. The No Build Alternative would leave the roadway width less than standard and not improve mobility for bicyclists or pedestrians.	**Consistent**. Build Alternative 2 would widen the bridge width to standard, with 8-foot shoulder/bicycle lanes and 8-foot sidewalks. Gaps in sidewalk continuity will be closed to increase pedestrian safety and mobility. ADA curb ramps will be implemented to ensure accessibility for disabled persons as well as pedestrians/bicyclists leading up from the San Gabriel River Channel.	**Consistent**. Build Alternative 3 would widen the bridge width to standard, with 8-foot shoulder/bicycle lanes and 8-foot sidewalks. Gaps in sidewalk continuity will be closed to increase pedestrian safety and mobility. ADA curb ramps will be implemented to ensure accessibility for disabled persons as well as pedestrians/bicyclists leading up from the San Gabriel River Channel.
Promote the safety of bicyclists and pedestrians by adhering to citywide standards and practices.	**Not Consistent**. The No Build Alternative would not improve safety for bicyclists and pedestrians on State Route (SR-1). Curb ramps and the bridge width would remain sub-standard.		
Require plans for bicycle and pedestrian facilities to give priority to providing continuity and closing gaps in the bikeway and sidewalk network.	**Not Consistent**. The No Build Alternative does not implement ADA curb ramps, increase shoulder/bicycle lane width, or ensure sidewalk continuity for all user types.		
Ensure accessibility of pedestrian facilities to the elderly and disabled.			

No Build Alternative

The No Build Alternative would not support achievement of the goals described above in Table 2.1-4 because safety and efficiency would not be enhanced and complete street features would not be constructed.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

As shown in Table 2.1-4, the proposed Build Alternatives 2 and 3 are consistent with planning goals, objectives, and policies expressed in local and regional plans and studies; therefore, there would be no adverse impacts.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

Avoidance, minimization, and/or mitigation measures are not required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Avoidance, minimization, and/or mitigation measures are not required.

2.1.1.3 COASTAL ZONE

Regulatory Setting

This project has the potential to affect resources protected by the Coastal Zone Management Act (CZMA) of 1972. The CZMA is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan are able to review federal permits and activities to determine if they are consistent with the state's management plan.

California has developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976, to protect the coastline. The policies established by the California Coastal Act are similar to those for the CZMA: They include the protection and expansion of public access and recreation; the protection, enhancement, and restoration of environmentally sensitive areas; the protection of agricultural lands; the protection of scenic beauty; and the protection of property and life from coastal hazards. The California Coastal Commission is responsible for implementation and oversight under the California Coastal Act.

Just as the federal CZMA delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments to enact their own local coastal programs (LCPs). This project is subject to The City of Long Beach's local coastal program. LCPs contain the ground rules for development and protection of coastal resources in their jurisdiction consistent with the California Coastal Act goals. A Federal Consistency Certification will be needed as well. The Federal Consistency Certification process will be initiated prior to final environmental document (FED) and will be completed to the maximum extent possible during the NEPA process.

GUIDANCE

Affected Environment

The San Gabriel River Bridge (Bridge No. 53-0060) crosses over the San Gabriel River Channel. The San Gabriel River receives drainage from 689 square miles of eastern Los Angeles County, with its headwaters originating in the San Gabriel Mountains. The lower part of the river flows through a concrete-lined channel in a heavily urbanized portion of the County before becoming a soft bottom channel once again near the ocean in the City of Long Beach.

The area in the immediate vicinity of the bridge consists of commercial and residential development and vegetated land (wetland, riparian).

Local Coastal Program

The California Coastal Act requires each community in the coastal zone to prepare an LCP, including a coastal Land Use Plan to protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural resources. An LCP consist of land use plans, zoning ordinances, and zoning district maps. LCPs must contain a specific public access component to assure maximum public access to the coast and ensure that public recreation areas are provided.

The Project site is located in the coastal zone as defined by the California Coastal Act. Figure 2.1-4 depicts the location of the proposed Project in the coastal zone.

The proposed Project area is subject to the Long Beach LCP's Southeast Area Specific Plan (SEASP), which provides comprehensive direction for the future land use of a 1,472-acre area in the City of Long Beach. The SEASP area is frequently viewed as one of the last remaining areas of Long Beach that is not entirely built out. Approximately 1,000 acres of the Specific Plan area are in the Coastal Zone, which includes waterways and right-of-way. The SEASP reflects the goals and preferences of the City as set forth in its plan.

The Project site is located on SR-1 at PM 0.04, in an area of both California Coastal Commission (State) Jurisdiction and City of Long Beach Local Coastal Program Jurisdiction. Figure 2.1-5 shows the coastal jurisdictions outlined by The City of Long Beach SEASP.

Caltrans will coordinate with the California Coastal Commission to request a consolidated Coastal Development Permit (CDP). See Chapter 4 for a record of coordination with the California Coastal Commission.

Environmental Consequences

No Build Alternative

If the proposed Project is not built, there will be no coastal zone impacts.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Policies within the Long Beach LCP's SEASP that pertain to this project are summarized in the Table 2.1-5; the reader is referred to the appropriate section of this document for more information.

The proposed project is not expected to create permanent adverse impacts to the local biological environment. Impacts to the San Gabriel River Channel will primarily consist of temporary effects during construction and a discussion of these impacts can be found in the Water Quality and Biological Environment Sections of Chapter 2 of this document.

Temporary access impacts to the San Gabriel River Bike Trail during construction will be minor and will be limited to a few days or less at a time. A Section 4(f) De Minimis has been prepared for this Project is included in the Appendices. A Traffic Management Plan (TMP) will also be implemented in order to ensure the unimpeded flow of traffic on SR-1. Public access to the coast will not be impeded by this Project, given that many routes and streets exist to access the coast.

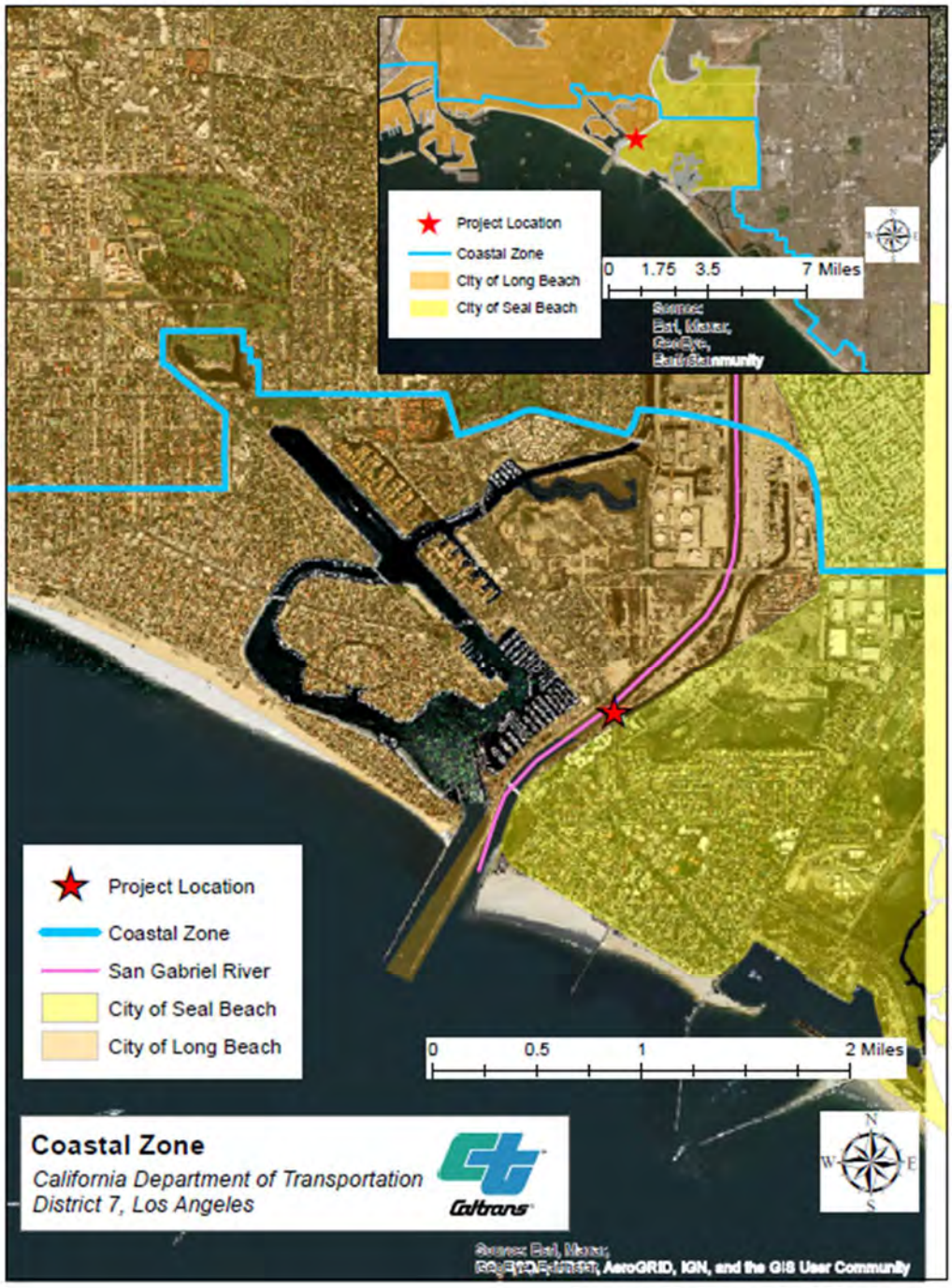
The proposed Project is not expected to have permanent adverse impacts on access and recreational resources in the coastal zone. With the widening of the bridge and roadway to accommodate multimodal transportation, this Project is expected to have an overall positive effect on the accessibility of coastal resources for all user types. The proposed project provides a 12-foot median and 8-foot wide right shoulders (class II bike lane), which provide adequate room to accommodate a future Class IV bike lane in lieu of a non-standard right shoulder. The use of see-through railings on the bridge will also improve the visual quality of the coastline for the public. Refer to the Parks and Recreational Facilities section of this document for more information on potential impacts to parks and other recreational areas.

Table 2.1-5 Consistency with the Long Beach Local Coastal Program SEASP

Policy Chapter/Page in the Long Beach LCP SEASP	Subject of Policy	Discussion	For further discussion of the Subject within this document
Chapter 5, page 67 (Section 5.1)	Environmentally Sensitive Area (ESA)	The Project footprint is situated near the Los Cerritos Wetlands. The Los Cerritos Wetlands qualifies as an ESA, according to the definition in the Coastal Act. Project activities will not directly impact the Los Cerritos Wetlands area.	Section 2.3.2
Chapter 6, page 98 and Chapter 8, page 154 (Section 6.7(d), Section 8.2.2)	Views (Scenic and Visual Qualities)	The proposed Project improvements do not have any expected visual impacts. Incorporation of certain proposed measures may enhance the viewshed for future traveling public (i.e. see through railings). *Avoidance and minimization measures are recommended*.	Section 2.1.5
Chapter 6, page 101 (Section 6.7(i))	Public Access	The Project would not impede public access to the coast. Minor temporary impacts to public access of the San Gabriel River Bike Path is expected during construction. A Section 4(f) De Minimis has been prepared.	Section 2.1.1.4
Chapter 5, page 84 (Section 5.5)	Water Quality	The proposed Project activities are anticipated to minimally impact water quality, with implementation of stormwater BMPs. Temporary impacts are estimated at the area under the bridge and a 50-foot buffer upstream and downstream from the bridge.	Section 2.2.2

Chapter 6, page 103 (Section 6.7(o))	Coastal Hazards	The proposed Project is subject to tsunami, liquefaction, earthquake, and flooding. The design of the bridge will minimize impacts to natural hazards.	Section 2.2.3
Chapter 6, page 104 (Section 6.7(p))	Tribal, Cultural, Archaeological Resources	The proposed Project is not expected to impact cultural resources. Out of an abundance of caution, a Native American monitor will be present during earth disturbing activities.	Section 2.1.6

Figure 2.1-4 Coastal Zone



Map created by Rocky Rojas, Division of Environmental Planning, February 8, 2022

Avoidance, Minimization, and/or Mitigation Measures

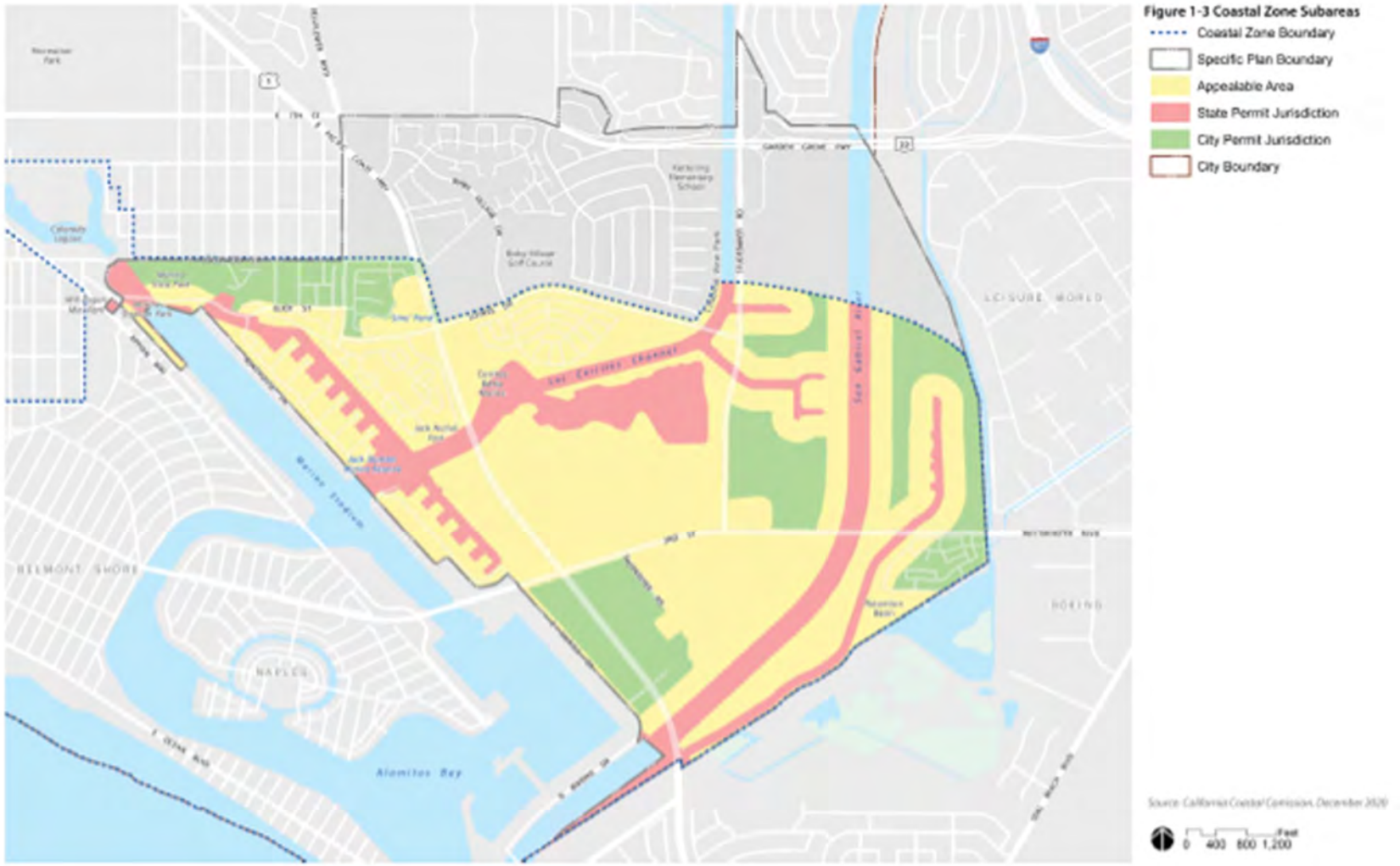
No Build Alternative

No avoidance, minimization, and/or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

CZ-1: A Coastal Development Permit (CDP) must be obtained from the California Coastal Commission prior to the start of construction. California Coastal Commission will need to approve the final project plans and all work activities.

Figure 2.1-5 Coastal Zone Jurisdictions



2.1.1.4 PARKS AND RECREATIONAL FACILITIES

Regulatory Setting

The Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409) prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

Section 4(f)/CFR, Title 23, Part 774

Section 4(f) under the Department of Transportation Act of 1966 was written in an effort to preserve publicly owned parks and recreation areas, waterfowl and wildlife refuges, and historic sites considered to have national, State, or local significance. U.S. Department of Transportation (USDOT) agencies and the Federal Highway Administration cannot approve the use or acquisition of land from any property that is deemed significant under Section 4(f) unless there is no other feasible and prudent alternative that will achieve the project purpose and need without harming the Section 4(f) property. The USDOT agencies and the FHWA are required to consider all alternatives and avoidance, minimization, and mitigation measures before justifying the use of a significant Section 4(f) resource.

Section 4(f) applies when a proposed project meets the following four conditions:

1. The project must require approval from FHWA in order to proceed.
2. The project must be a transportation project.
3. The project must require the use of land from a property protected by Section (4f) (23 USC Section 138(a) and 49 USC Section 303(a)); and
4. None of the regulatory applicability rules or exceptions applies (23 CFR 774.11 and 13)

Section 4(f) defines “use” in three ways: actual use, temporary occupancy, and constructive use. Actual use under Section 4(f) is the permanent incorporation of right-of-way Section 4(f) protected lands into a transportation facility or project. Constructive use involves the evaluation of indirect or “proximity” impacts to a 4(f) resource. No actual use or “take” is involved. A constructive use occurs when the project’s proximity impacts are so severe that the protected activities, features or attributes that qualify the resource for protection under Section 4(f) are “substantially impaired”.

Affected Environment

Parks and recreational resources include any park, recreational facility, designated public open space area, recreational bikeway, and other recreational trails within 0.5 mile of the proposed Project.

The Los Cerritos Wetlands Complex is situated directly adjacent to the Project study area, on the southeastern side. The Los Cerritos Wetlands Authority (LCWA) provides for the comprehensive acquisition, protection, conservation, restoration, maintenance and operation and environmental enhancement of the Los Cerritos Wetlands area. The LCWA is currently the only land-owning entity in the conservation area with the stated goals of conservation and restoration. Currently 255.67 acres of public property lie within the wetland boundary. 172 acres are owned by LCWA.

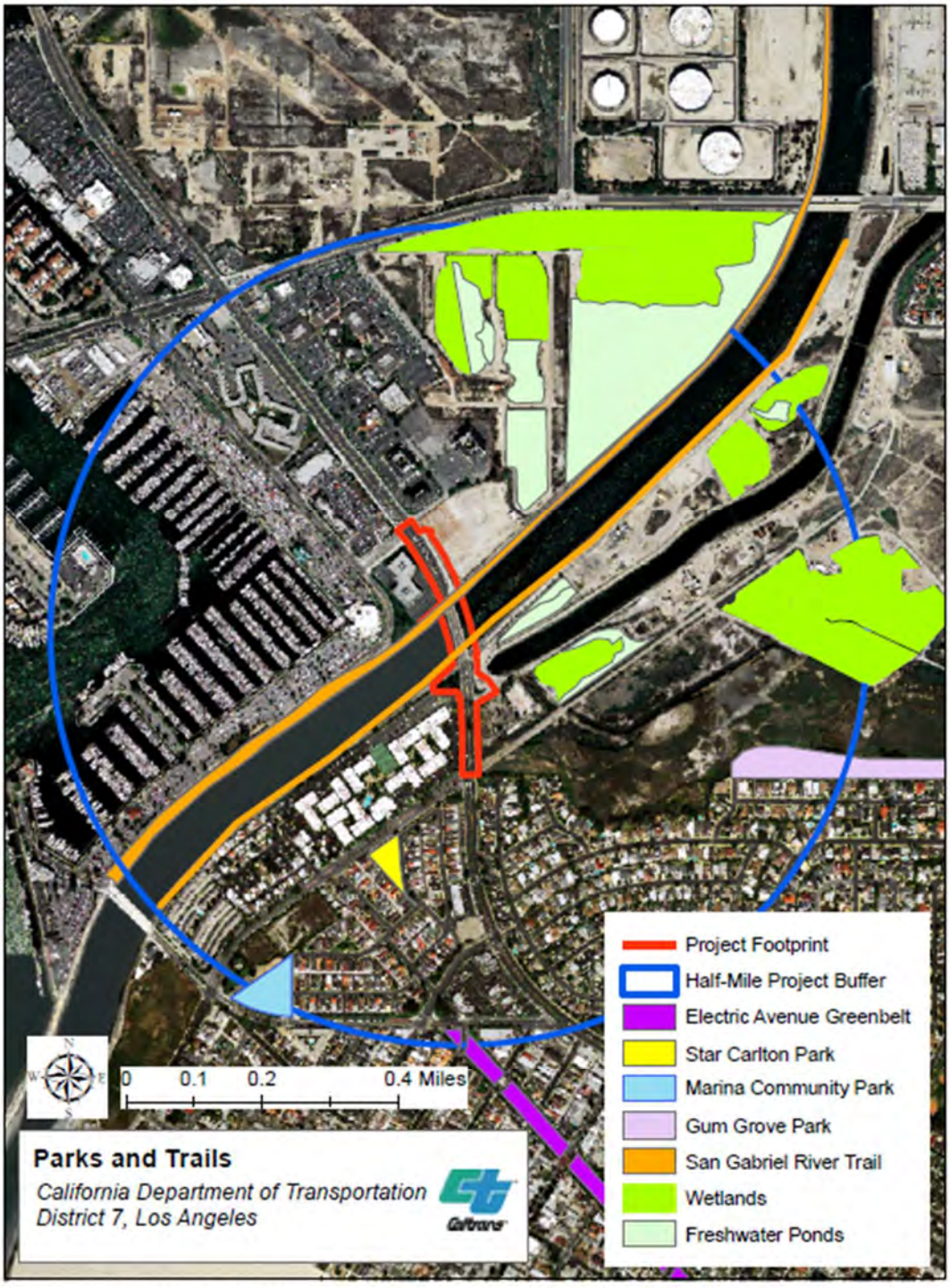
The San Gabriel River Trail is a publicly owned recreational trail within the proposed Project limits. The City of Long Beach is the official with jurisdiction (OWJ) over the San Gabriel River

Trail. The San Gabriel River Trail is a multi-use trail that runs north-south and spans a length of 35.4 miles, between Seal Beach and Azusa. The trail is a popular bicycle route.

Marina Community Park, Star Carlton Park, Electric Avenue Greenbelt, and Gum Grove Park are all within 0.5 mile of the project area. However, these four (4) parks are well outside of the Area of Potential Effects (APE) for the proposed Project. There are no potential Project impacts to the five aforementioned parks.

Figure 2.1-5 shows the locations of National, State, and local parks near the project area.

Figure 2.1-6 Parks and Trails



Source: SCAG Open GIS Data, LA County GIS Hub

Map created by Rocky Rojas, Division of Environmental Planning, February 8, 2022

Environmental Consequences

No Build Alternative

The No Build Alternative does not propose any improvements and therefore would not impact any parks or recreational facilities. There would be no Section 4(f) impact.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Both Build Alternatives of the proposed Project are in the same location and the proposed Project is adjacent to the Los Cerritos Wetlands. The Los Cerritos Wetlands is protected by Section 4(f) of the Department of Transportation Act of 1966. However, this project will not "use" those facilities as defined by Section 4(f). Please see Appendix A under the heading "Resources Evaluated Relative to the Requirements of Section 4(f)" for additional details.

The San Gabriel River Trail, is a Section 4(f) resource and will be temporarily occupied, or "used" during the proposed Project construction activities. Safe passage of pedestrians and bikes will be maintained during construction through the use of a protective canopy over the San Gabriel River Trail. The trail will need to be temporarily closed for the installation of the canopy, bridge demolition trestle platform installation, and for any other safety related issues. These closures will be limited to a few days at a time or less. Advance notice of the closures will be posted and detours will be provided when feasible.

A Section 4(f) De Minimis has been prepared for this Project and is included in the Appendices. Coordination with the official with jurisdiction over the Section 4(f) resource, the City of Long Beach, has been documented and is included in Chapter 4 of this document.

No permanent access impacts to the San Gabriel River Trail are expected as a result of the Project. Both Build Alternatives will actually improve access between SR-1 and the San Gabriel River Trail by constructing new bridge sidewalk curb ramps at begin and end points of the bridge to meet pedestrian/bicycle ramps leading up from the San Gabriel River Channel.

This project will not affect facilities that are protected by the Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409). The Park Preservation Act prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

No properties protected by the Park Preservation Act will be acquired during the proposed Project.

Avoidance, Minimization, and Mitigation Measures

No Build Alternative

No avoidance, minimization, and/or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

PR-1 As part of the process for preparing a Section 4(f) De Minimis, Caltrans will post public notices in the Project area to notify the public about the Project and potential temporary impacts to the San Gabriel River Trail. Once the notice has been posted for 30 days and any comments from the public have been addressed, a Section 4(f) De Minimis will be finalized and shared with the official with jurisdiction (City of Long Beach).

2.1.2 COMMUNITY IMPACTS

2.1.2.1 Community Character and Cohesion

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). The Federal Highway Administration (FHWA) in its implementation of NEPA (23 USC 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

The following analysis is based on data gathered from the U.S. Census Bureau. Characteristics of the community such as population, race, ethnicity, income, and housing were evaluated to determine the character and cohesion of the community surrounding the Project area. Community cohesion is the degree to which residents have a sense of belonging to their neighborhood, their level of commitment to the community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time.

The Project area is located along SR-1 both within the City of Long Beach to the north of the San Gabriel River Channel (northern limits) and within the City of Seal Beach to the south of the San Gabriel River Channel (southern limits). The community study area was defined as the area within a 0.5-mile radius of the project footprint. Data was collected from four census tracts within the study area. U.S. Census data was collected for the Cities of Long Beach and Seal Beach, as well as both Los Angeles County and Orange County in order to compare the study area characteristics with the overall regional characteristics.

Data presented in this section used to describe the regional and community demographic characteristics within the project study area are based on census tract information from the U.S. Census Bureau 2016-2019 American Community Survey 5-Year Estimates and the 2020 Decennial Census.

<u>Project Area</u>

In the Project area northwest of the San Gabriel River Channel is a commercial lot which includes financial offices and a parking lot. To the northeast of the Project area is an undeveloped, vacant area of land. To the southwest of the Project area are multi-family residences and a parking lot. To the southeast of the Project area is vacant land. The Area of Potential Effects (APE) for the proposed Project is directly adjacent to the parking lot for the multi-family residences on the southwestern side. The upgrading and widening of the bridge structure will not divide any established community.

Table 2.1-6 and Figure 2.1-6 identify the census block groups that overlap within the Project area

Table 2.1-6 List of Study Area Census Tracts

Census Tracts	City	County
5776.04	Long Beach	Los Angeles
9800.07	Long Beach	Los Angeles
995.12	Seal Beach	Orange
995.04	Seal Beach	Orange

Figure 2.1-7 Census Tracts

Data Source: U.S. Census Bureau

Community Characteristics

Population and Age

Table 2.1-7 shows the age distribution of the population within the region and the community study area of the project. The data shows the population of the study area generally follows a similar trend when compared to the broader Los Angeles County and Orange County. The City of Seal Beach and Census Tract 5776.04 have higher percentages of people aged 65 years and older, than other regions. In Los Angeles County, Orange County, The City of Long Beach, and the four surrounding Census Tracts, more than half of each of their population groups are aged between 18-64 years old.

Table 2.1-7 Age Distribution

Geography	<18 years	%	18-64 years	%	≥65 years	%	Total
County							
Los Angeles	2,214,760	22%	6,530,832	64.80%	1,335,978	13.20%	10,081,570
Orange	704,508	22.20%	2,008,431	63.40%	455,105	14.40%	3,168,044
City							
Long Beach	104, 436	22.40%	309,029	66.20%	53,311	11.40%	466,776
Seal Beach	3,095	12.80%	11,452	47.30%	9,657	39.90%	24,204
Census Tract							
5776.04	81	6%	868	63.50%	418	30.50%	1,367
9800.07	No data		No data		No data		No data
995.12	328	11.10%	2,069	69.90%	562	19%	2,959
995.04	605	22.60%	1,416	52.80%	658	24.60%	2,679

Source: U.S. Census Bureau, 2016-2019 American Community Survey 5-Year Estimates

Race and Ethnicity

Table 2.1-8 presents the race and ethnic distribution of population within the region and study area. Overall, the largest ethnic group in the community study area is the White population; it represents the highest percentages for all the Census Tracts. In the City of Long Beach, the Hispanic or Latino population is the highest percentage of all groups. In the City of Seal Beach, the White population is the highest percentage. In the broader regions of Los Angeles County and Orange County, the Total Minority populations are the largest group.

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Table 2.1-8 Race and Ethnic Composition

Geography	Total Population	White Total	White %	Black Total	Black %	American Indian and Alaska Native Total	American Indian and Alaska Native %	Asian alone Total	Asian alone %	Native Hawaiian and Other Pacific Islander alone Total	Native Hawaiian and Other Pacific Islander alone %	Some other race alone Total	Some other race alone %	Two or more races Total	Two or more races %	Hispanic or Latino Total	Hispanic or Latino %	Total Minority (including Hispanic or Latino) Total	Total Minority (including Hispanic or Latino) %
County																			
Los Angeles	10,014,009	2,563,609	25.60%	760,689	7.60%	18,453	0.20%	1,474,237	14.70%	20,522	0.20%	58,683	0.60%	286,849	2.90%	4,804,763	48%	7,450,400	74.40%
Orange	3,186,989	1,198,655	37.60%	49,304	1.50%	5,298	0.20%	699,124	22.00%	7,714	0.24%	14,818	0.50%	125,242	3.90%	1,086,834	34%	1,988,334	62.40%
City																			
Long Beach	9	121,970	26.10%	55,894	12%	1,119	0.20%	59,309	12.70%	3,937	0.80%	2,736	0.60%	19,781	4.20%	201,997	43.30%	344,772	73.90%
Seal Beach	25,242	16,814	66.60%	370	1.50%	53	0.20%	3,624	14.40%	46	0.20%	91	0.40%	1,091	4.30%	3,153	12.50%	8,428	33.40%
Census Tract																			
5776.04	1,300	937	72.10%	30	2.30%	2	0.20%	96	7.40%	6	0.40%	8	0.60%	46	3.50%	175	13.50%	363	28%
9800.07	No data	No data		No data		No data		No data		No data		No data		No data		No data		No data	
995.12	3,091	2,146	69.40%	81	2.60%	21	0.70%	216	7.00%	6	0.20%	11	0.40%	154	5.00%	456	14.80%	945	30.60%
995.04	2,696	1,986	73.70%	14	0.50%	3	0.11%	196	7.30%	8	0.30%	6	0.20%	156	5.80%	327	12.10%	710	26.30%

Source: U.S. Census Bureau, 2020 Decennial Census

Income

The 2019 Median Household Income is presented in Table 2.1-9. The median household income in 2019 in Los Angeles County was $68,044, $90,234 in Orange County, $63,017 in the City of Long Beach, and $68,852 in the City of Seal Beach. Census Tracts 5776.04, 995.12, and 995.04 had a median household income higher than that of Los Angeles and Orange Counties and the Cities of Long Beach and Seal Beach. The Project area is not at a disproportionately low-income range as the Census Tracts surrounding the project area all had median household incomes higher than the United States Department of Health and Human Services (HHS) Poverty Guidelines. Census Tract 9800.07 does not have reported United States Census data.

Table 2.1-9 Median Household Income (2019)

Geography	Estimate; Median household income in the past 12 months (in 2019 inflation-adjusted dollars)	HHS Poverty Guidelines (Family of Four; 2019)
County		$25,750
Los Angeles	$68,044	
Orange	$90,234	
City		
Long Beach	$63,017	
Seal Beach	$68,852	
Census Tract		
5776.04	$99,000	
9800.07	No data	
995.12	$118,958	
995.04	$126,429	

Source: U.S. Census Bureau, 2016-2019 American Community Survey 5-Year Estimates, United States Department of Health and Human Services, 2019 Poverty Guidelines

Housing

As shown in Table 2.1-10 Household Type by Household Size, the households in the Census Tracts of the study area contain a higher mean percentage of two or more people than single-person households. As a general rule, this would indicate that the area has a higher degree of community cohesion.

The Census Tracts in the study area, with the exception of Census Tract 995.12, contain higher percentages of homeowners than compared to broader Los Angeles County and Orange County. Census Tract 995.12 is 58.2% renter occupied, which represents a larger percentage of renter occupied housing than the other Census Tracts, however, this is consistent with the City

of Long Beach (57% renter occupied). In general, the study area has a higher than average percentage of homeownership, indicating a higher degree of community cohesion than Los Angeles and Orange County as a whole.

Table 2.1-10 Household Type by Household Size

Households	Los Angeles County		Orange County		Long Beach		Seal Beach		Census Tracts 5776.04		9800.07		995.12		995.04	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Total:	3,316,795		1,037,492		166,813		12,542		774		No Data		1,457		978	
Family households:	2,210,939	66.7%	744,011	71.7%	99,501	59.6%	6,076	48.4%	379	49.0%	No Data		772	53.0%	794	81.2%
2-person household	729,436	22.0%	262,745	25.3%	34,633	20.8%	3,843	30.6%	274	35.4%	No Data		473	32.5%	403	41.2%
3-person household	525,212	15.8%	172,169	16.6%	24,538	14.7%	1,042	8.3%	87	11.2%	No Data		225	15.4%	131	13.4%
4-person household	488,542	14.7%	166,342	16.0%	20,058	12.0%	810	6.5%	12	1.6%	No Data		65	4.5%	141	14.4%
5-person household	259,533	7.8%	81,194	7.8%	12,053	7.2%	335	2.7%	6	0.8%	No Data		0	0	119	12.2%
6-person household	114,737	3.5%	33,787	3.3%	4,967	3.0%	37	0.3%	0	0.0%	No Data		0	0	0	0
7-or-more-person household	93,479	2.8%	27,774	2.7%	3,252	1.9%	9	0.1%	0	0.0%	No Data		0	0	0	0
Nonfamily households:	1,105,856	33.3%	293,481	28.3%	67,312	40.4%	6,466	51.6%	395	51.0%	No Data		685	47.0%	184	18.8%
1-person household	851,304	25.7%	218,835	21.1%	51,639	31.0%	5,278	42.1%	341	44.1%	No Data		478	32.8%	162	16.6%
2-person household	201,990	6.1%	54,757	5.3%	12,765	7.7%	667	5.3%	54	7.0%	No Data		169	11.6%	22	2.2%
3-person household	34,161	1.0%	11,733	1.1%	1,721	1.0%	71	0.6%	0	0	No Data		38	2.6%	0	0
4-person household	12,340	0.4%	5,488	0.5%	872	0.5%	0	0.0%	0	0	No Data		0	0	0	0
5-person household	3,677	0.1%	1,974	0.2%	195	0.1%	0	0.0%	0	0	No Data		0	0	0	0
6-person household	1,252	0.04%	413	0.04%	86	0.1%	0	0.0%	0	0	No Data		0	0	0	0
7-or-more-person household	1,132	0.03%	321	0.03%	34	0.02%	0	0.0%	0	0	No Data		0	0	0	0

Source: U.S. Census Bureau, 2016-2019 American Community Survey 5-Year Estimates

Table 2.1-11 Total Population in Occupied Housing Units by Tenure

Population in Housing Units	Total population in occupied housing units		Owned with a mortgage or a loan		Owned free and clear		Renter Occupied	
	Total	%	Total	%	Total	%	Total	%
County								
Los Angeles	9,646,924	N/A	4,148,772	43%	730,073	7.60%	4,768,079	49.40%
Orange	2,970,996	N/A	1,487,407	50%	268,517	9%	1,215,072	41%
City								
Long Beach	453,980	N/A	168,023	37%	27,231	6%	258,726	57%
Seal Beach	23,943	N/A	8,841	36.90%	8,848	37%	6,254	26.10%
Census Tract								
5776.04	1,387	N/A	864	62.30%	225	16.20%	298	21.50%
9800.07	No Data	N/A	No Data	No Data	No Data	No Data	No Data	No Data
995.12	2,866	N/A	877	30.60%	322	11.20%	1,667	58.20%
995.04	2,733	N/A	1,933	70.70%	478	17.50%	322	11.80%

Source: U.S. Census Bureau, 2016-2019 American Community Survey 5-Year Estimates

Environmental Consequences

No Build Alternative

The No Build Alternative would not result in any change to the existing community and would not have any effect on community character or cohesion.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The proposed Project will widen the existing bridge roadway and upgrade the bridge railing to current standards for the purpose of improving traffic safety and overall lifespan of the bridge structure. The Project (1) would not bisect a neighborhood or community; (2) would not change existing commute patterns or transit routes; and (3) would not displace any community serving facilities.

Direct impacts that could affect community character or cohesion would not occur because the Build Alternatives do not involve construction of a new roadway; all improvements are along existing roadway. For the same reason, the Build Alternatives would not bisect an existing residential neighborhood or community.

Impacts to community services and facilities would be temporary with only minor interruptions to access. Nevertheless, a Traffic Management Plan (TMP) would be implemented and appropriate outreach efforts to those affected would be made as part of the project which would organize traffic patterns during construction and ensure that access to businesses and residences is maintained at all times during construction. There are proposed temporary construction easements (TCE) for both Build Alternatives and Build Alternative 3 would require permanent easement acquisitions. However, this would not require relocation of any residences.

Overall, the proposed project aims to provide multi-modal and community benefits by providing standard shoulders and pedestrian sidewalks, thereby increasing safety in the Project area.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, and/or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

No avoidance, minimization, and/or mitigation measures are required.

2.1.2.2 RELOCATIONS AND REAL PROPERTY ACQUISITION

Regulatory Setting

The Caltrans' Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of the RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix C for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, persons with disabilities, religion, age, or sex. Please see Appendix B for a copy of the Department's Title VI Policy Statement.

Please refer to Appendix C for information on the Department's Relocation Assistance Program (RAP) procedures and guidelines.

Affected Environment

Information in this section is from the *Right-of-Way Data Sheet* prepared for this project (November 2021). It analyzes potential Right-of-Way acquisition impacts on residential and nonresidential properties within the study area under Build Alternatives 2 and 3. The proposed Project is located in The City of Long Beach and The City of Seal Beach along SR-1. See the Land Use (Section 2.1.1) and Community Cohesion (Section 2.1.4) of this environmental document for a full description of the existing characteristics within the study area.

A full acquisition of a property is required when all or a substantial portion of a property is needed for right-of-way purposes and the current use can no longer operate on that site. A partial acquisition would occur when a smaller portion of a property is to be acquired, but full use of the property and its structure can remain. Generally, partial acquisitions consist of portions of a back, side, or front yard; landscaping; or parking (but not in numbers sufficient to subvert building code requirements). Another form of property use is a Temporary Construction Easement (TCE), which is the temporary use of a portion of a property only during project construction (typically needed for construction staging or equipment and materials storage use). Once construction is completed, property within a TCE is restored to the pre-construction state.

Environmental Consequences

No Build Alternative

No property or acquisitions or relocations would occur under the No Build Alternative.

Build Alternative 2

Implementation of Build Alternative 2 would require the acquisition of property located within the proposed SR-1 right-of-way. Build Alternative 2 would result in eleven (11) Temporary Construction Easements (TCEs). The TCEs would not result in the relocations of any businesses or residences. Details on the various acquisitions resulting from Build Alternative 2 are shown in Table 2.1-12 Summary of Impacted Properties.

Build Alternative 3 (Preferred Alternative)

Implementation of Build Alternative 3 would require the acquisition of property and structures located within the proposed SR-1 right-of-way. Build Alternative 3 would result in five (5) partial easement acquisitions and nine (9) TCEs. The easements and TCEs would not result in the relocations of any businesses or residences. Details on the various acquisitions resulting from Build Alternative 3 are shown in Table 2.1-12 Summary of Impacted Properties.

Table 2.1-12 Summary of Impacted Properties

APN Number*	Address	Land Use Type	Type of Acquisition
7242-012-008	Address Not Available (Parcel over San Gabriel River Channel)	Commercial/Industrial	TCE
7242-012-900	Address Not Available (Parcel over San Gabriel River Channel)	Vacant Land	TCE
7242-012-005	Address Not Available (Parcel over San Gabriel River Channel)	Vacant Land	TCE
7242-012-006	6700 E Pacific Coast Highway Long Beach CA 90803	Commercial/Industrial	TCE
7237-020-043	6701 Pacific Coast Highway Long Beach CA 90803	Vacant Land	Partial and TCE
7237-020-003	Address Not Available (Parcel over San Gabriel River Channel)	Vacant Land	TCE
7237-020-029	Address Not Available (Parcel over San Gabriel River Channel)	Vacant Land	Partial and TCE

APN Number*	Address	Land Use Type	Type of Acquisition
7237-020-900	SE line of Pacific Coast Highway Orange County CA	Vacant Land	Partial and TCE
7237-020-275	E line of Pacific Coast Highway Long Beach CA	Vacant Land	Partial and TCE
7237-020-280	Address Not Available	Vacant Land	TCE
7237-020-902	SE line of Pacific Coast Highway Orange County CA	Vacant Land	Partial and TCE

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

Avoidance, minimization, and/or mitigation measures are not required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Avoidance and minimization measures shall include the following:

REL-1: Prior to construction, Caltrans will obtain all required right-of-way. Owners of property to be acquired shall be compensated for the fair market value of the property as well as damages, if any, to the remaining portions of their properties in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act. All eligible displaces will be compensated for moving expenses. All benefits and services will be provided equitably to all relocates without regard to race, color, religion, age, national origin, or disability as specified under Title VI of the Civil Rights Act of 1964.

2.1.2.3 ENVIRONMENTAL JUSTICE

Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2021, this was $26,500 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964, and related statutes, have also been included in this project. The Department's commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix B of this document.

Affected Environment

Title VI of Civil Rights Act of 1964 requires that no person, because of race, color, religion, national origin, sex, age, or handicap, be excluded from participation in, denied benefits of, or be subjected to discrimination by any federal aid activity. Executive Order 12898 broadens this requirement to require that disproportionately high and adverse health or environmental impacts to minority and low-income populations be avoided or minimized to the greatest extent feasible.

The Council on Environmental Quality (CEQ) is an advisory body that has the oversight of the federal government's compliance with EO 12898 and NEPA has developed guidance for implementing environmental justice under NEPA. CEQ guidance recommends: (1) Minority populations should be identified where either, (a) the minority population of the affected area exceeds 50 percent or, (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis; (2) Low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census' Current Population.

A minority individual is defined as a person belonging to any of the following population groups: Black; Hispanic or Latino; Asian American, American Indian or Alaskan Native; or Native Hawaiian or Pacific Islander. Low-income is defined as those individuals whose household income is at or below the poverty guidelines set by the Department of Health and Human Services (HHS).

The presence of low-income and minority populations was determined through the use of census data collected from the U.S. Census Bureau 2016-2019 American Community Survey 5-Year Estimates. Demographic data were obtained for the various census tracts within the study area and are identified in Table 2.1-8 (Section 2.1.2.1). Census data for the census tracts within the Project study area were compared to the local cities and countywide demographics to help determine where disproportionate impacts on low-income and minority residents may occur.

There are several minority populations in the census tracts that overlap with the Project study area. Table 2.1-13 shows that all of the census tracts in the study area have a lower percentage

of minorities than in Long Beach, Seal Beach, Los Angeles County and Orange County. The percentage of non-minorities within the census tracts is higher than the percentage of minorities. Therefore, the percentage of minorities in the Project study area is lower than the percentage of minorities in Long Beach, Seal Beach, Los Angeles County, and Orange County as a whole.

Table 2.1-9 (Section 2.1.2.1) presents the 2019 Median Household Income of the study area, compared with the median household income for Long Beach, Seal Beach, Los Angeles County, and Orange County. All census tracts in the study area had a higher median household income compared to those of Long Beach, Seal Beach, Los Angeles County, and Orange County. None of the census tracts had a median household income lower than the HHS Poverty Guidelines for a family of four at $25,750 per year.

Based on the U.S. Census Bureau data, it can be inferred that the four census tracts in the Project study area do not contain a disproportionately high number of minority or low-income individuals.

Overall, as shown in Table 2.1-13 Summary of Minority Demographics, the Project Study Area has lower percentages of Minority Groups compared to the Cities of Long Beach and Seal Beach, as well as Los Angeles County and Orange County.

When the Minority Factors and Low-Income/Poverty Status Population Demographics are averaged for the study area, as shown in Table 2.1-14 below, all four of the Census Tracts have lower minority populations and lower low-income status populations than those of the Cities of Long Beach and Seal Beach, in addition to broader Los Angeles County and Orange County.

Table 2.1-13 Summary of Minority Demographics

Geography	Total Population	White		Minority (including Hispanic or Latino)	
		Total	%	Total	%
County					
Los Angeles	10,014,009	2,563,609	25.60%	7,450,400	74.40%
Orange	3,186,989	1,198,655	37.60%	1,988,334	62.40%
City					
Long Beach	466,742	121,970	26.10%	344,772	73.90%
Seal Beach	25,242	16,814	66.60%	8,428	33.40%
Census Tract					
5776.04	1,300	937	72.10%	363	27.90%
9800.07	No Data	No Data	No Data	No Data	No Data
995.12	3,091	2,146	69.40%	945	30.60%
995.04	2,696	1,986	73.70%	710	26.30%

Source: U.S. Census Bureau, 2016-2019 American Community Survey 5-Year Estimates

Table 2.1-14 Minority Factors and Low-Income/Poverty Status Population Demographics

Geography	Minority Population	Poverty Status Population
County		
Los Angeles	74.40%	14.90%
Orange	62.40%	10.90%
City		
Long Beach	73.90%	16.80%
Seal Beach	33.40%	5.70%
Census Tract		
5776.04	27.90%	4.80%
9800.07	No Data	No Data
995.12	30.60%	6.30%
995.04	26.30%	2.10%

Source: U.S. Census Bureau, 2016-2019 American Community Survey 5-Year Estimates

Environmental Consequences

No Build Alternative

The No Build Alternative does not propose improvements and would therefore not result in any environmental justice impacts.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Overall, the proposed Project would not result in any adverse impacts and would not have disproportionate impacts to minority and/or low-income populations. Although minority populations exist within the project area, their percentages are lower than both the Cities of Long Beach and Seal Beach, and the Counties of Los Angeles and Orange.

Based on the above discussion and analysis, the proposed Project will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898. No further environmental justice analysis is required.

The proposed Project would have temporary impacts associated with issues such as noise, dust, construction traffic, and truck traffic along the detour routes during the construction period. These impacts would be temporary and can be avoided or minimized with implementation of BMPs such as those included in the Traffic Management Plan (TMP), which would ensure that traffic impacts would be minimized during construction.

The proposed Project would be beneficial by improving overall roadway conditions and upgrading the nonstandard bridge features to standard. Project improvements will provide benefits to travelers at local and regional levels. The proposed Project would benefit the community and enhance multi-modality by providing several improvements including widening

the shared shoulder/bike path, widening the sidewalk and closing a gap in sidewalk continuity, and ensuring pedestrian features incorporate current ADA standards. Minority and low-income populations are anticipated to have equal access to the improvement benefits provided by the proposed Project.

No minority or low-income populations that would be adversely affected by the proposed Project have been identified as determined above. Therefore, this project is not subject to the provisions of Executive Order 12898.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, and/or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Avoidance measures:

EJ-1 Public Outreach/Notices of Project will be published in Spanish Language Newspaper such as “La Opinion”

2.1.3 UTILITIES/EMERGENCY SERVICES

Regulatory Setting

This section addressed potential impacts on public utilities and emergency services that would result from construction of the proposed project. Short-term construction impacts on public utilities and emergency services are addressed in Section 2.4 Construction Impacts.

Affected Environment

Utilities

The project area is served by the following water, wastewater, electric, natural gas, oil, waste, and telecommunications systems providers:

Water: City of Long Beach Water Department, City of Seal Beach Water Services
Wastewater: Los Angeles County Sanitation District Number 29 (Long Beach Water Department, Long Beach Water Reclamation Plant), Orange County Sanitation District (Seal Beach)
Natural Gas: Southern California Gas Company (SoCalGas), Lomita Gasoline, Seal Beach Gas Processing Joint Venture (SBGP)
Electricity: Southern California Edison (SCE)
Oil: Tesoro, Shell, Chevron, Crimson Pipeline
Waste: Republic Services, Waste Management
Telecommunications: Verizon, Verizon FiOS, Spectrum, AT&T U-Verse, Frontier Communications

Utilities within the direct impact study area include: a Southern California Edison (SCE) electrical line, a SoCalGas line, two (2) Chevron Gasoline gas lines, six (6) SBGP gas lines, a Marathon oil line, two (2) Shell oil lines, four (4) Chevron oil lines, and two (2) Crimson Pipeline oil lines.

Emergency Services

Long Beach Fire Department Station 21 is the only fire station within 0.5-mile of the Project study area. There are no police stations within 0.5-mile of the Project site. The closest police station is the Seal Beach Police Department station which is located approximately 1.2 miles to the northeast at 911 Seal Beach Boulevard in the City of Seal Beach.

There are no hospitals located within a 0.5-mile buffer of the Project area; however, there is the Nair Urgent Care located in the project area at 6553 Pacific Coast Highway. The Project area is served by 2 hospitals: The Community Hospital of Long Beach, located about 4 miles northwest at 1720 Termino Avenue, and Los Alamitos Medical Center, located about 6 miles northeast at 3751 Katella Avenue.

Environmental Consequences

No Build Alternative

The proposed Project would not be built under the No Build Alternative; therefore, there would be no impact on utilities or emergency services.

Build Alternative 2

Utilities

Build Alternative 2 would require the relocation of eight (8) utilities in the Project limits due to placement conflicts with the proposed improvements, or proximity to proposed improvements and requirements for clearance distances. Utilities that would require relocation for this Build Alternative include:

- 2 Chevron Gasoline gas lines (8-inch)
- 2 SBGP gas lines (8-inch)
- 1 Marathon oil line (6 5/8-inch)
- 1 Chevron oil line (8-inch)
- 2 Crimson Pipeline oil lines (8-, 12-inch)

Existing utilities and those that are relocated would be located within existing or proposed ROW limits. All utility relocations would be planned and implemented in coordination with utility providers. It is not anticipated that the proposed project would adversely affect utility services as a result of the anticipated utility relocations. Caltrans coordination with the utility providers is required to avoid temporary or permanent impacts on users. Implementation of the proposed project would not result in adverse long-term impacts on utilities.

Emergency Services

Temporary and short-term traffic closures and detours during construction could result in impacts on circulation and access for emergency services. Project feature, PF-T-1, creation of a Traffic Management Plan (TMP), would be implemented as part of the project to avoid or minimize such impacts. All closures and detours would be coordinated with local jurisdictions and providers of these services in order to avoid or minimize impacts on emergency services to the community. The Project would not affect existing community facilities and would not increase demand in a manner requiring additional facilities or services.

Build Alternative 3 (Preferred Alternative)

Utilities

Build Alternative 3 would require the relocation of three (3) utilities in the Project limits due to placement conflicts with the proposed improvements, or proximity to proposed improvements and requirements for clearance distances. Utilities that would require relocation for this Build Alternative include:

- 1 SBGP gas line (8-inch)
- 1 Chevron oil line (8-inch)
- 1 Crimson Pipeline oil line (8-inch)

Existing utilities and those that are relocated would be located within existing or proposed ROW limits. All utility relocations would be planned and implemented in coordination with utility providers. It is not anticipated that the proposed project would adversely affect utility services as a result of the anticipated utility relocations. Caltrans coordination with the utility providers is required to avoid temporary or permanent impacts on users. Implementation of the proposed project would not result in adverse long-term impacts on utilities.

Emergency Services

Temporary and short-term traffic closures and detours during construction could result in impacts on circulation and access for emergency services. Project feature, PF-T-1, creation of a Traffic Management Plan (TMP), would be implemented as part of the project to avoid or minimize such impacts. All closures and detours would be coordinated with local jurisdictions and providers of these services in order to avoid or minimize impacts on emergency services to the community. The Project would not affect existing community facilities and would not increase demand in a manner requiring additional facilities or services.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

Avoidance, minimization, and/or mitigation measures are not required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The following project features would be implemented as part of the proposed Project:

PF-T-1: A Final Transportation Management Plan (TMP) shall be developed in detail during final design.

PF-UES-1: Utility relocation plans will be prepared in consultation with the affected utility providers/owners for those utilities that will need to be relocated, removed, or protected in-place.

PF-UES-2: All temporary ramp and arterial roadway closures and detour plans will be coordinated with law enforcement, fire protection, and emergency medical service providers.

UES-1: The Office of the State Fire Marshal (OSFM) currently regulates the safety of intrastate hazardous liquid pipeline in California. OSFM Pipeline Safety Division staff inspect pipeline operators to ensure compliance with federal and state pipeline safety laws and regulations. Hazardous liquid pipelines can carry commodities such as crude oil, gasoline, propane, and other types of hydrocarbons. OSFM must respond to intrastate pipeline accidents, investigate significant intrastate pipeline releases, inspect pipeline construction and relocation projects, respond to train derailments near pipelines, and meet with state and local governments to discuss various pipeline safety issues.

UES-2: Coastal Best Available Technology (CBAT, formerly known as AB-864) must be followed. AB 864 required that any new or replacement pipeline near environmentally and ecologically sensitive areas (EESA) in the coastal zone to use best available technologies to reduce the amount of oil released in an oil spill to protect state waters and wildlife. Additionally, it required that an operator of an existing pipeline near these sensitive areas submit a plan to retrofit the pipeline to the OSFM. Finally, OSFM was required to develop regulations pursuant to these requirements by July 1, 2017.

California Code of Regulations, Title 19 Public Safety, Division 1 State Fire Marshall, Chapter 14 Hazardous Liquid Pipeline Safety, Article 7, Sections 2107 and 2109 will be adhered to.
https://osfm.fire.ca.gov/media/11548/_01_text2ndwdatescertain-final-clean.pdf

UES-3: The California State Oil Spill Contingency Plan is an independent document regarding discharges of oil to all marine or inland or surface waterways of California, and for oil spills to land. All state and local agencies must carry out spill response activities consistent with this Plan (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=172767&inline) and other applicable federal, state, or local spill response plans.

The statutes OPA 90 and SB 2040 were enacted in consequence of the catastrophic oil spills of 1989 and required contingency planning by both State and Federal Governments. The U.S. Coast Guard (USCG) and California Department of Fish and Wildlife (CDFW) Office of Spill Prevention and Response (OSPR) agreed to joint preparation of six contingency plans through co-chairing the three Port Area Committees (ACPs) for Contingency Planning: USCG Port Areas for San Francisco, Los Angeles/Long Beach, and San Diego.

The Area Committee planning process is a proactive effort to deal with potential oil releases. It is open to all stakeholders and has involved representatives from over 50 agencies, including federal, state, local, industry and environmental participants. The three Port ACPs provide guidance for the first 24 hours of response, and each of the six coastal planning areas have provided detailed evaluation and recommendations for protection of regional shoreline resources. https://wildlife.ca.gov/OSPR/Contingency

2.1.4 TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES

Regulatory Setting

Caltrans, as assigned by the Federal Highway Administration (FHWA), directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of Federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all Federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). The FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to federal-aid projects, including Transportation Enhancement Activities.

Affected Environment

The proposed Project is located on an existing State multilane conventional highway facility (SR-1) at the San Gabriel River Bridge (Bridge No. 53-0060). SR-1 is a major east-west traffic artery connecting the City of Long Beach to the City of Seal Beach across the San Gabriel River Channel.

The existing traffic volumes (Table 2.1-15) in the area were used as the baseline for the traffic and accident analysis. The data were collected in 2017 and show the annual average daily traffic (AADT) to be about 42,500 vehicles in the project study area on SR-1.

Table 2.1-16 Existing Accident Conditions displays the accident rate data taken from the Transportation Systems Network (TSN)(January 2017-December 2019) Reports, provided by Caltrans, showing the total accident rates on the segment of SR-1 near the Project area. In this segment, there were 3 recorded collisions and no fatal accidents. The type of collisions are as follows: 1 rear end (33.33 percent), 1 not stated (33.33 percent), and 1 broadside (33.33 percent).

The major factors causing the collisions are as follows: 2 not stated (66.66 percent), and 1 other-none apparent/inattention (33.33 percent).

Table 2.1-15 Existing Traffic Volumes

Route	PM	Description	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak Hour	Ahead Peak Month	Ahead AADT
1	32.721	Seal Beach, Seal Beach Boulevard	4450	49000	45950	4450	49500	45950
1	33.719	Los Angeles/ Orange County Line	4100	46000	42500	N/A	N/A	N/A
1	0	Los Angeles/ Orange County Line	N/A	N/A	N/A	4100	46000	42500
1	1.86	Long Beach, Bellflower Boulevard	3350	37000	34500	2550	28000	26000

AADT = Annual Average Daily Traffic
PM = Post Mile

Source: California Department of Transportation, 2017 Traffic Volumes

Table 2.1-16 Existing Accident Conditions

Post Mile	Number of Accidents			Actual (acc/mvm)			Average (acc/mvm)		
	Total	Fatal	Injury	Fatal	F+I	Total	Fatal	F+I	Total
0/0.14	3	0	2	0	0.3	0.3	0.009	0.4	0.9

acc/mvm = Accident per Million Vehicle Miles traveled
F+I = Fatal + Injury
Average (acc/mvm) = average for similar state routes

Existing Pedestrian and Bike Facilities

This segment of SR-1, including the San Gabriel River Bridge, has a protected Class II bike lane in the northbound and southbound directions. Class II bicycle facilities are defined by a pavement striping and signage to delineate a portion of the roadway for bicycle travel (California Department of Transportation, July 2017). The shoulder and bike path are shared along this segment of SR-1. The existing shared shoulder/bike lanes are 5-feet wide and are too narrow to accommodate a bike path while providing 2-feet wide buffers for safety. The latest highway design standard requires 8-feet wide shoulders.

The existing bridge has 5-feet wide raised sidewalks for pedestrian use. The current pedestrian sidewalks are too narrow and result in lower pedestrian comfort. The latest highway design standard requires a minimum of 6-feet wide sidewalks. The Project proposes to install ADA compliant sidewalk curb ramps at the begin and end points of the bridge to meet the pedestrian/bicycle ramps leading up from the San Gabriel River Channel. It is recommended that a 187 foot sidewalk be installed at the southwest end of the bridge to provide pedestrian sidewalk continuity.

Transit Facilities

Long Beach Transit, the local transit service for the project area, provides service along SR-1 between the City of Long Beach and the City of Seal Beach. Bus Route 171 passes through Long Beach in an east-west direction along SR-1.

Transportation Systems Management and Transportation Demand Management

The City of Long Beach currently utilizes Intelligent Transportation Systems (ITS) management techniques to make roadways more efficient. These systems use technology to collect real-time traffic and parking data. The data is then used to make adjustments to traffic signals or to provide information to drivers through real-time electronic signs along the roadway or through the car's navigation system, so they can make adjustments to their travel routes.

In an effort to promote Transportation Systems Management strategies that encourage positive driver behavior and reduce impact on the environment, the City of Long Beach proposes a three-pronged approach. The promotion of use of neighborhood electric vehicles, Transportation Demand Management (TDM), and encouraging car share programs.

Transportation Demand Management is a system of strategies ands policies designed to reduce travel demand by reducing the number of single-occupancy vehicle trips during peak commute hours. Walking, biking, or taking transit is a key component of TDM programs. Strategies include facilitating carpool or vanpool programs for employees, offering shuttle services between transit stations and businesses, and giving preferential parking spaces to carpools or vanpools, to name a few. The City of Long Beach will continue to implement TDM practices to mitigate traffic and air quality effects related to development projects.

Environmental Consequences

No Build Alternative

If the project is not built, there would be no effect on existing traffic conditions. There would be no impact due to construction vehicles nor any improvement in pedestrian or bicycle mobility in the area.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Build Alternatives 2 and 3 would not reduce or add capacity to the existing roadway. The proposed bridge widening for either Alternative would provide more space for the bicycle lanes and pedestrian travel. This would help promote multimodal transportation on SR-1.

The traffic effects associated with Alternative 2 are similar to those for Alternative 3. Safe passage and access for pedestrians and bicyclists on the San Gabriel River Bike Path will be maintained during construction through the use of a protective canopy over the bike path. The bike path will need to be temporarily closed for the installation of the canopy, bridge demolition, trestle platform installation, and for any other safety related issues. These closures will be limited to a few days at a time or less. Advance notice of closures will be posted and detours will be provided when feasible. Coordination has been conducted with the official with jurisdiction of the bike path, the City of Long Beach.

A Transportation Management Plan (TMP) will be developed for the proposed work activities.

The proposed Build Alternatives would include widening of shoulders, sidewalks, and installation of curb ramps. These components would comply with the City of Long Beach and the City of Seal Beach's long-term plan for Pacific Coast Highway (PCH) as well as Caltrans' Complete Streets and ADA policies.

Avoidance, Minimization, and/or Mitigation Measures

TT-1: All affected transportation infrastructure will be replaced with equivalent transportation infrastructure of the same capacity as that currently present.

TT-2: The California Department of Transportation (Caltrans) and its construction contractors will seek to minimize disruption of service as much as possible through the use of a Transportation Management Plan that will provide detailed access and detour strategies to minimize delays for the public and emergency vehicles.

TT-3: Caltrans will work with the City of Long Beach and the City of Seal Beach to ensure public access and the availability of emergency and public services during the construction period.

2.1.5 VISUAL/AESTHETICS

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). To further emphasize this point, the Federal Highway Administration (FHWA), in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities" (CA Public Resources Code [PRC] Section 21001[b]).

California Streets and Highways Code Section 92.3 directs Caltrans to use drought resistant landscaping and recycled water when feasible, and incorporate native wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

Affected Environment

A *Questionnaire to Determine Visual Impact Assessment* was prepared on August 2, 2021 to assess the proposed Project's potential to affect local visual resources. The results of this analysis have been incorporated in this section. The Project site is located on SR-1 at San Gabriel River Bridge (Bridge No. 53-0060). Figures 2.1-9, 2.1-10, and 2.1-11 show the key views at Post Mile 0.04 on the bridge. The key views are the San Gabriel River to both the north and south of the bridge. The San Gabriel River Bike Trail is also viewable at the project limits. The existing landscape consists of a coastal, urban environment that is highly trafficked. Beyond the Project area, land uses consist of undeveloped open space at the Los Cerritos Wetlands, commercial, residential and industrial uses, in addition to paved roadway surfaces with landscaped vegetation. There is no vegetation under the San Gabriel River Bridge.

The San Gabriel River flows under the bridge into the Pacific Ocean. The existing landscape consists of sparse vegetation on the northwest and southwest ends of the bridge in an urban coastal setting comprised of vacant land, low-level commercial, and multi-family residential buildings.

The original bridge was built in 1931 and extended on both ends in 1962.

The proposed Project site is on an eligible State scenic highway, but the site is not officially designated as a scenic highway. None of the components of the proposed project site are in an area containing unique scenic resources, nor are they located within an existing scenic vista.

Figure 2.1-8 Similar Barrier to Type 80 required to comply with the Caltrans and California Coastal Commission agreement for bridge railings within coastal zones

Figure 2.1-9 View looking northbound, San Gabriel River to the right

Figure 2.1-10 View looking northeast at existing Mission-style railing

Figure 2.1-11 View looking southwest with an existing bike lane and traffic lanes with San Gabriel River

Environmental Consequences

No Build Alternative

If the Project were not built, there would be no change to the existing visual and aesthetic qualities of the area. In the long-term, failure to modernize the existing roadway and bridge railing would result in it becoming outdated and not in alignment with current design standards.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The proposed bridge railing upgrade and bridge widening will not result in adverse impacts to the nearby visual resources, including views of the San Gabriel River and surrounding landscape.

The Project would use open railings approved by the California Coastal Commission that would give travelers over the bridge better views of the San Gabriel River and the coast. Vehicle travelers have low sensitivity to the bridge because they travel at high speeds and have a brief view of the bridge. Pedestrians and bicyclists traveling over the proposed bridge will have more time to enjoy the views since the bridge will be widened and will include wider sidewalks and shared shoulder/bike lanes. This viewer group has moderate sensitivity to the bridge because

they travel at a slower speed. Overall, the upgraded bridge is expected to generate a positive viewer response.

There will be no noticeable change in the physical characteristics of the existing environment and the proposed Project has high compatibility with the surrounding scale of the community. The Project activities pose low sensitivity to potential viewer-groups and hold no potential to be controversial within the community. The preparation of a more detailed visual analysis would not provide additional benefit to the public.

Avoidance, Minimization, and/or Mitigation Measures

The proposed bridge upgrade does not have any expected visual impacts and the following measures will be taken to further ensure that no visual impacts will occur.

VIS-1 A bridge railing design approved by the California Coastal Commission will be used to improve the visibility.

2.1.6 CULTURAL RESOURCES

Regulatory Setting

The term "cultural resources," as used in this document, refers to the "built environment" (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including "historic properties," "historic sites," "historical resources," and "tribal cultural resources." Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the Federal Highway Administration (FHWA), the ACHP, the California State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the ACHP's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA's responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term "tribal cultural resources" to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires the Department to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the NRHP or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with PRC Section 5024 are outlined in a Memorandum of Understanding (MOU)[1] between the Department and SHPO,

effective January 1, 2015. For most Federal-aid projects on the State Highway System, compliance with the Section 106 PA will satisfy the requirements of PRC Section 5024.

Affected Environment

The following documents provide information on historic resources within the Area of Potential Effects (APE) and serve as the basis for the analysis in this section:

- Historic Property Survey Report (January 2022)
- Bridge Inventory Sheet (January 2021)
- Archaeological Survey Report (December 2021)

Area of Potential Effects

The Area of Potential Effects (APE) was established to identify the geographic area within which the proposed project may directly or indirectly affect any significant historic, architectural, and archaeological resources, if any such resources exist. The direct APE includes areas where physical impacts from the project would occur. These are generally limited to the project's proposed footprint and include the horizontal and vertical limits associated with ground-disturbing activities. The expected maximum depth of excavation for the vertical extent of anticipated ground-disturbing activities is approximately 80 feet for piers, whereas excavations for the retaining walls, sidewalks, and guardrails will range from 1 to 6 feet. No excess material disposal facility is identified for the project, as no excess material is expected to be removed off site.

Background Research

A records search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC) indicated that a resource, P-19-000272, had been previously recorded on the east bank of the San Gabriel River, on the southwest end of Bridge No. 53-0060 at an elevation of approximately 16 feet 3 inches below sea level. The records search also showed a concentration of archaeological sites to the east of the bridge, on a low-lying prominence known as Landing Hill. P-19-000272 is likely associated with the complex of sites on Landing Hill. Examination of As-Built plans show that the existence of a 60-foot-wide water tunnel associated with the Haynes Generating Station traverses under State Route 1, where it connects to Bridge No. 53-0060, through the recorded location of P-19-000272, and across the San Gabriel River toward the Alamitos Bay Marina. The 1960 construction of the canal and 60-foot-wide water tunnel likely resulted in the complete destruction of the portion of P-19-000272 that may have been situated within the APE.

Field Surveys

A pedestrian survey of the APE was conducted on June 10, 2021 to identify any evidence for extant cultural resources, but none were found. Surveys determined that the project area has been subjected to a great deal of disturbance and that much of the Project's APE is paved over or is located under water.

Native American Consultation

Native American consultation and coordination for the project was initiated on January 12, 2021 with a request to the Native American Heritage Commission (NAHC) for a Sacred Lands File

(SLF) search. This was followed by a January 13, 2021 letter invitation to four local Native American groups for consultation under Assembly Bill 52 (AB 52) and Section 106. No response was received to the January 13 invitation to consult. In a January 25, 2021 letter, the NAHC responded that Native American cultural sites are present in the area of the project and provided a list of 11 Native American representatives that may have additional knowledge of resources located in the vicinity. Caltrans sent letters on February 2, 2021 to all 11 representatives informing them of the project and inviting them to consult under Section 106.

Ms. Joyce Perry of the Juaneno Band of Mission Indians Acjachemen Nation-Belardes requested copies of site records for P-19-000272 and for sites on Landing Hill. Ms. Perry also requested that a Native American observer be on site for ground disturbing activities.

Mr. Andrew Salas of the Gabrieleno Band of Mission Indians-Kizh Nation expressed concerns regarding the project and provided information on the Salas family history and familial ties to the project vicinity. Mr. Salas further stated that the presence of any cultural materials within the project area, even if these are secondary deposits, are of importance to the Tribe.

Mr. Anthony Morales of the Gabrielino/Tongva San Gabriel Band of Mission Indians stated that the project area is highly sensitive for cultural resources. Mr. Morales further stated that a Native American observer needs to be present during ground disturbing activities.

The results of the cultural resources study was shared with Mr. Morales, Mr. Salas, and Ms. Perry and, out of an abundance of caution and in deference to their concerns, Caltrans will implement archaeological and Native American monitoring of project-related ground-disturbing activities. As outlined in project features PF-CUL-1 and PF-CUL-2, should there be any discovery of archaeological materials, construction activities shall halt and the protocols and procedures outlined in the Post-Review Discovery and Monitoring Plan (PRDMP) prepared for the project will be followed. In addition, should human remains be uncovered, the procedures and protocols outlined in PF-CUL-3 and the PRMDP will be followed.

Environmental Consequences

No Build Alternative

Under the no-build conditions, there would be no improvements to the Project area nor bridge structure. There would be no actions that would impact cultural resources within the Project area. Therefore, there would be no impacts to cultural resources under the No Build Alternative.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

There are no cultural resources within the APE. The proposed Project finding is No Historic Properties Affected. The Build Alternatives are not expected to affect any Section 4(f) historic properties because none were found in the APE.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, and/or mitigation measures are needed.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The following project features and avoidance measures would be implemented as part of the proposed Project:

PF-CUL-1: Caltrans has developed a Post-Review Discovery and Monitoring Plan (PRDMP) with delineation of the entirety of the Project area as an archaeological monitoring area (AMA). Both Native American and archaeological monitoring of the AMA will be implemented. If unanticipated discovering occur during Project construction, the procedures and protocols in the PRDMP will be followed as well as PF-CUL-2 and PF-CUL-3 (see below).

PF-CUL-2: If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

PF-CUL-3: If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Claudia Harbert, Caltrans District 7 Native American Coordinator, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.2 Physical Environment

2.2.1 HYDROLOGY AND FLOODPLAIN

Regulatory Setting

Executive Order (EO) 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration (FHWA) requirements for compliance are outlined in 23 Code of Federal Regulations (CFR) 650 Subpart A.

To comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments.
- Risks of the action.
- Impacts on natural and beneficial floodplain values.
- Support of incompatible floodplain development.
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

Affected Environment

This section of the Draft Initial Study/Environmental Assessment (IS/EA) evaluates the potential hydrology and floodplain impacts associated with the implementation of the proposed Project alternatives. Evaluation is required when projects are anticipated to encroach on a 100-year base floodplain. The Project site sits over the San Gabriel River Channel and is within the Federal Emergency Management Agency (FEMA) 1% annual chance flood (100-year floodplain) area. The analysis presented in this section is based on the Draft Sea Level Rise Analysis (June 2022), Location Hydraulic Study Form (June 2022), and the Draft Stormwater Data Report (April 2022).

Historically, California coastal communities have been susceptible to major storms. Like most of Southern California, the cities of Long Beach and Seal Beach are subject to unpredictable seasonal rainfall. Winter rains are scant most years; however, every few years the region is subjected to periods of intense and sustained precipitation that results in flooding. Localized flooding occurs along the coast in creeks during peak storm events. Floods are natural and recurring events that become hazardous when human encroach onto floodplains, modifying the landscape, increasing the amount of impervious surfaces, and building structures in areas meant to convey excess water during floods.

A potential flooding hazard could be caused by two primary sources: rains or earthquakes. Flood control measures to cope with infrequent but intense rainfall have been taken throughout the entire Los Angeles Basin. These flood control activities are under the auspices of the Los Angeles County Flood Control District and the Corps of Engineers, which work in conjunction with local municipalities. Earthquake-induced flooding is the result of failure of water-retaining

structures during earthquakes or especially high sea level fluctuations due to a tsunami or seiche. Areas within 2 feet above mean sea level are considered most susceptible and areas over 2 feet above to 5 feet above mean sea level are considered secondary flooding zones.

Designated Flood Zones

FEMA provides information on flood hazards and frequency for cities and counties, based on its Flood Insurance Rate Maps (FIRMs). A FIRM is the official map of a community for which FEMA has delineated the Special Flood Hazard Areas (SFHAs) to indicate flood hazard potential and identify the risk premium zones applicable to the community under the National Flood Insurance Program. Figure 2.2-1 is a flood zone map depicting the City of Long Beach, which includes the Project area relative to the base 100-year floodplain. SFHAs are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual flood chance is also referred to as the base flood or 100-year flood. The SFHA includes designated Zones A, AE, AH, AO, AR, A99, V, and VE.

Environmental Consequences

No Build Alternative

If the proposed Project were not built, there would be no alterations or improvements to the existing bridge structure and roadway. Therefore, there would be no changes to the existing environment, and no disturbance of soils or increase in impervious surface area.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

23 CFR 650.105 defines a significant floodplain encroachment of a highway as: (1) a significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or provides a community's only evacuation route; (2) a significant risk; or (3) a significant adverse impact on natural and beneficial floodplain values.

Potential impacts to water quality could occur during construction of the proposed Project due to increased erosion or accident spills. However, Best Management Practices (BMPs), including erosion control measures, would be implemented during construction of the proposed Project to reduce impacts to water quality. Therefore, construction of the Project would not result in short-term adverse impacts to natural and beneficial floodplain values.

In addition, under the Construction General Permit, the Build Alternatives would also be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) along with the construction BMPs, aimed at reducing pollutants of concern in storm water runoff. With the inclusion of Project Feature PF-WQ-1 (outlined in Section 2.2.2.4 of this document), the temporary impacts to beneficial floodplain values would not be adverse.

The project site at the San Gabriel River bridge (Bridge No. 53-0060) is approximately 1 mile from the end of the outlet of the San Gabriel River to the Pacific Ocean, but is not affected by waves. The San Gabriel River is a part of the Los Angeles County Drainage Area system, which is under the control of and is monitored by the U.S. Army Corps of Engineers (USACE). Levees, also monitored by USACE, line both channel banks and offer flood protection to the areas behind them. Based on the Location Hydraulic Study for this project, the project is not within a regulatory floodway. During a 100-year flood event, the bridge would be protected by the

existing levees. The Project would not cause any changes to existing flood events or the frequency of their occurrence.

The proposed Project is in a flood zone characterized as AE, instead of a coastal VE designation. Because of this AE designation, the bridge does not require wave analysis as part of any study. The 1% annual exceedance probability (AEP) base flood elevation (BFE) at the Project location is at 8-foot elevation (North American Vertical Datum of 1988) (NAVD 88). The levees near the bridge are at approximately 14.4 feet (NAVD 88). The surface of the bridge deck is at an elevation of 19.00 feet (NAVD 88). The deck is 5 feet thick, giving the soffit (the underside of the bridge deck) an elevation of 14 feet (NAVD 88). The railing for the bridge is 4 feet high, giving it an elevation of 23.00 feet (NAVD 88).

The proposed Project would result in the construction of roadway and bridge structure improvements within the Project area. The purpose of the Project is to improve roadway safety for all users by upgrading the bridge structure to current design standards and not to increase capacity. Therefore, the proposed Project would not expose additional roadway users to the existing flood risks. The Project would not change the overall land use in the watershed basin and would not add substantial amounts of impervious surface area to the watershed.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

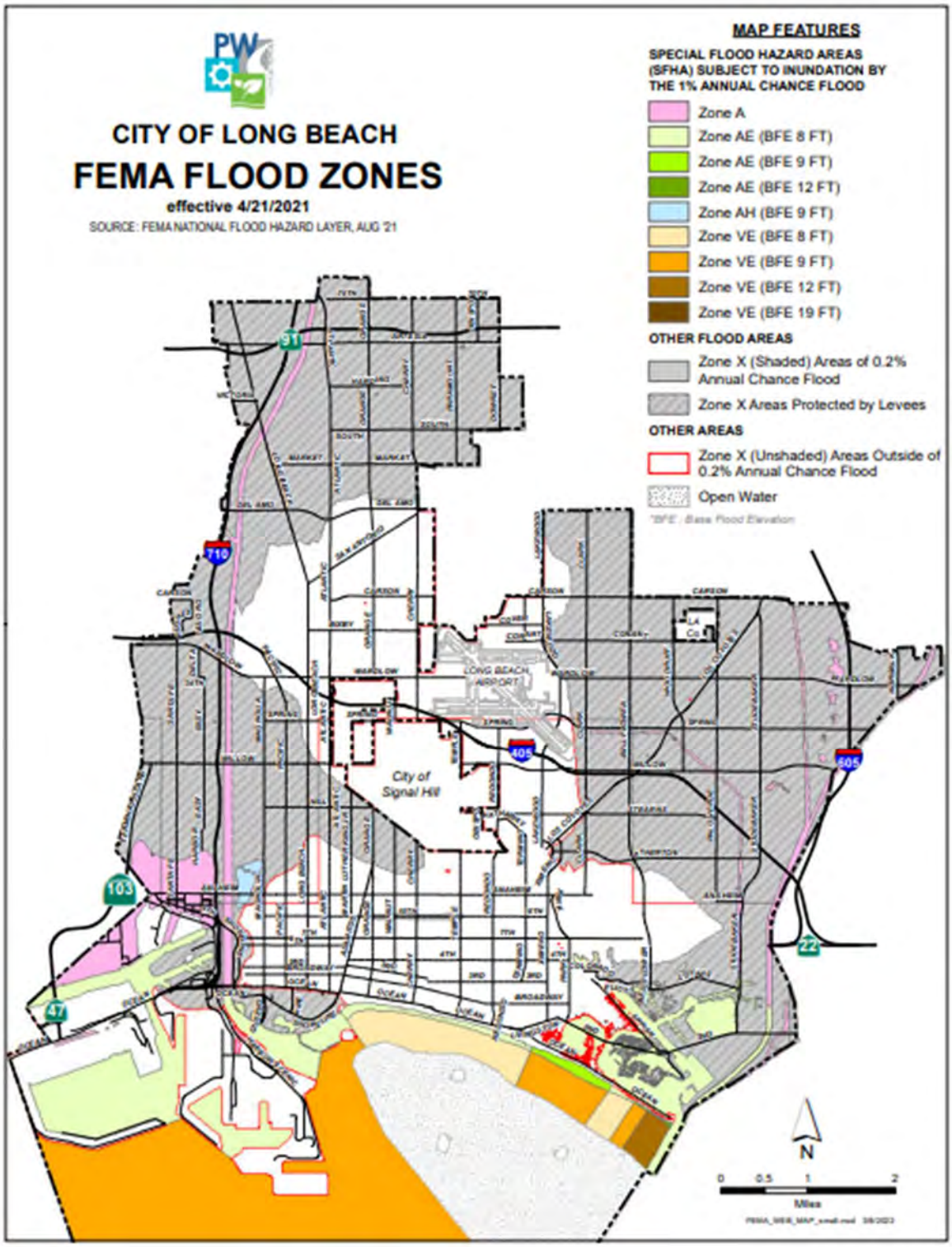
No avoidance, minimization, and/or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The proposed Project improvements are not anticipated to cause significant floodplain encroachment impacts because there would be a minimal increase in the BFE and would have sufficient vertical clearance to avoid flood waters during a 100-year flood event.

HF-1: Since the Project is located within a FEMA floodplain and a rise in the water surface elevation is being shown as a result of the Project, a Conditional Letter of Map Revision and later a Letter of Map Revision would be required to be obtained through FEMA for changes to the floodplain due to the Project.

Figure 2.2-1 FEMA Flood Zones



2.2.2 WATER QUALITY AND STORM WATER RUNOFF

Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source[2] unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.

- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).

- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).

- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of the USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency's (U.S. EPA) Section 404 (b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable

[2] A point source is any discrete conveyance such as a pipe or a man-made ditch.

alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent[3] standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

- **National Pollutant Discharge Elimination System (NPDES) Program**

  Municipal Separate Storm Sewer Systems (MS4)

  Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An

[3] The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."

MS4 is defined as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water.” The SWRCB has identified the Department as an owner/operator of an MS4 under federal regulations. The Department’s MS4 permit covers all Department rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The Department’s MS4 Permit, Order No. 2012-0011-DWQ (adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (conformed and effective April 7, 2015) has three basic requirements:

1. The Department must comply with the requirements of the Construction General Permit (see below);

2. The Department must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and

3. The Department storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the maximum extent practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, the Department developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within the Department for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices the Department uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

Construction General Permit

Construction General Permit, Order No. 2009-0009-DWQ (adopted on September 2, 2009 and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17, 2012). The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop Storm Water Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective SWPPP. In accordance with the Department's SWMP and Standard Specifications, a Water Pollution Control Program (WPCP) is necessary for projects with DSA less than one acre.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the U.S. must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as WDRs under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

Affected Environment

This section describes the affected environment for water quality and stormwater runoff within the Project area and immediate vicinity. It includes a range of topics related to water resources, including receiving bodies of water and water quality. The discussion has been excerpted from multiple sources, including the Draft Storm Water Data Report prepared by the Caltrans Office of Design (April 2022) and independent research performed by the Caltrans Division of Environmental Planning.

The proposed Project lies within the Hydrologic Sub Area #405.15, San Gabriel River Watershed in Los Angeles County and is under jurisdiction of the Los Angeles Regional Water

Quality Control Board (LARWQCB). San Gabriel River is a natural waterway that flows into the Pacific Ocean and is connected to navigable waters, therefore the Project also falls under the United States Army Core of Engineers (USACE) jurisdiction as Waters of the United States and California Department of Fish and Wildlife (CDFW) as Waters of the State. A Section 404 Nationwide Permit (USACE), Section 401 Certification (RWCQB), Section 408 Civil Works Permit and 1602 Lake and Streambed Alteration Agreement (CDFW) would need to be obtained prior to any impacts to jurisdictional resources at this bridge location.

The hydrologic area is Lower San Gabriel River Watershed, and the hydrologic unit is San Gabriel River. The San Gabriel River receives drainage from 689 square miles of eastern Los Angeles County; its headwaters originate in the San Gabriel Mountains. It has a main channel length of approximately 58 miles. The river empties to the Pacific Ocean at the Los Angeles/Orange County boundary in Long Beach. The lower part of the river (the lower watershed) flows through a concrete-lined channel in a heavily urbanized portion of the county before becoming a soft bottom channel once again near the ocean in the City of Long Beach.

Pollutants

Pollutants from residential and commercial activities have impaired water quality in the middle and lower watershed. Tertiary effluent from several sewage treatment plants enter the San Gabriel River in its middle reaches, while two power generating stations discharge cooling water into the river's estuary. The San Gabriel River Watershed is covered under two municipal storm water National Pollutant Discharge Elimination System (NPDES) permits. Several landfills are also located in the watershed.

Large electrical power lines follow the river along the channelized portion of the river; nurseries, small stable areas, and storage facilities are located in these areas. Flow in these lower reaches is dominated by effluent from several municipal wastewater treatment facilities and MS4 discharges. Impairments vary by reach; depending on the reach, they may include metals, PCBs, pesticides, bacteria, and trash.

Groundwater

The Project area is located within the span of the Coastal Plain of Los Angeles, as part of the Central Basin. The Central Basin underlies the southeastern part of the Los Angeles Coastal Plain, covering 277 square miles. The southeast boundary between the Central and Orange County Groundwater Basins roughly follows the Coyote Creek. Groundwater in the Central Basin occurs in Holocene and Pleistocene sediments at relatively shallow depths. Groundwater enters the Central Basin through surface and subsurface flow and by direct percolation of precipitation, stream flow, and applied water.

Recharge to the Central Basin and Orange County Coastal Plain occurs primarily by engineered recharge of stormwater, imported water, and reclaimed water along the upper reaches of the San Gabriel and Santa Ana Rivers and the Rio Hondo. The general quality of ground water in the Central Basin Region has degraded substantially from background levels. Much of the degradation reflects land uses.

Seawater intrusion that has occurred in the Central Basin is now under control in most areas through an artificial recharge system consisting of spreading basins and injection wells that form fresh water barriers along the coast.

Soils

Soils are classified into four hydrological soil groups (United States Department of Agriculture, Soil Conservation Service/Natural Resources Conservation Service): A, B, C, and D, where Type A is the most pervious with low runoff potential (e.g. sand and gravel), and Type D is the

least pervious with high runoff potential (e.g. clay soils). In the Project area, sandy loam (Type A) and Bolsa Silty Loam (Type B) are the primary soil types. Type A soils have a high infiltration rate when thoroughly wetted and Type B soils have a moderate infiltration rate when thoroughly wetted. The total disturbed soil area by the Project's proposed improvements, including construction activities, is estimated at 0.26 acres for Alternative 2 and 0.64 acres for Alternative 3.

Environmental Consequences

No Build Alternative

If the proposed Project is not built, there would be no alterations or improvements to the existing bridge structure and adjoining roadway, thereby posing no changes to the existing environment, and requiring no disturbance of soils nor increase in impervious areas. Therefore, the No Build Alternative would not present any potential impacts in terms of water quality or stormwater runoff.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Based on the proposed scope of work for Build Alternative 2, the Project is anticipated to increase stormwater volume due to a net increase of 0.28 acres in new impervious surface area. For Alternative 3, the Project activities will increase stormwater volume due to a net increase of 0.88 acres in new impervious surface area.

Runoff quality from roadways Is highly variable depending on various factors, including climatic conditions; annual average daily traffic (AADT); roadway and shoulder material and conditions; surrounding land uses; and other factors. Pollutants of concern such as heavy metals, pesticides, debris, and organic compounds are already present in the Project area. The Project would implement avoidance and minimization measures to limit additional new pollutants from entering water courses.

Asbestos Containing Material (ACMs) and Lead Based Paint (LBP) may be present on the existing bridge. Further detailed studies to determine levels of contamination and efforts to mitigate or avoid these hazardous waste materials will be specified during the design phase. If hazardous waste levels are above the allowable concentrations, then coordination with the Stormwater Coordinator and the Hazardous Waste Branch will take place to ensure that runoff during construction will not further impact downstream water bodies or groundwater.

The depth to the groundwater was encountered between elevations +1.1 to +2.3 feet during 1960 field investigation. The San Gabriel River flows into Pacific Ocean at the bridge site. Due to the depth to the groundwater, dewatering will be required. The dewatered effluent shall be trucked off site and disposed of according to existing laws and regulations.

There are no contaminated soils, other than Aerially Deposited Lead (ADL), identified within the Project limits. A Site Investigation (SI) will be required for this Project during the Plans, Specifications, and Estimates (PS&E) phase to determine the actual levels of contamination so provisions can be made for special handling and disposal of the contaminated soils and groundwater.

Overall, with the implementation of Caltrans Standard Specifications and project design standards and features, including environmental commitment measures and applicable stormwater Best Management Practices (BMPS), the proposed Project's construction, design, and facility operation will result in minimal impacts to water quality.

Total Maximum Daily Loads (TMDL)

A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards and an allocation of that amount to the pollutant's sources. Water quality standards are set by the California RWQCB, which identifies uses for each waterbody and aquatic life support, and the scientific data to support that use. A TMDL is the sum of allowable loads of a single pollutant from all contributing point and nonpoint sources. The Clean Water Act, Section 303, establishes the water quality standards and TMDL programs.

The Project limits fall within the San Gabriel River Watershed. The TMDLs for the watershed are as shown in Table 2.2-1 as follows:

Table 2.2-1 San Gabriel River Watershed TMDLs

San Gabriel River

Pollutant(s)	Effective Date	LA RWQB Resolution No.	Categorical Implementation Requirements[12]
Title: TMDL for Metals and Selenium in the San Gabriel River and its Tributaries			
Metals (Cu, Pb, Zn) and Se	03/26/2007 Revised 10/13/2014	R13-004	Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain metals and Se. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil.
Title: TMDL for Indicator Bacteria in the San Gabriel River, Estuary and Tributaries			
Indicator bacteria	06/14/2016	R15-005	Dry-weather non-storm water and wet-weather discharges may significantly increase bacterial loading to receiving waters. Caltrans shall implement control measures and/or BMPs to prevent the discharge of bacteria from its R/W. Source control measures include street sweeping, illegal dumping clean-up, public education on littering. BMPs include devices which treat storm water through retention/detention, infiltration and/or diversion.
Title: Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL			
Toxic pollutants (dichlorodiphenyltrichloroethane (DDT), polycyclic aromatic hydrocarbons (PAHs), total polychlorinated biphenyls (PCBs), metals (Cu, Pb, Zn))	03/23/2012	R11-008	Targeted pollutants are to be monitored in the water column in the channel and harbors as well as the sediment in the harbors. The TMDL requires the dischargers of the Los Angeles River and the San Gabriel River to monitor water quality at the mouth of each river. Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain toxic pollutants as listed in the TMDL. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil.

Jurisdictional Waters

Table 2.2-2 Permanent and Temporary Impacts to Jurisdictional Waters

Regulatory Agency	Permanent Impact (Acres)	Temporary Impact (Acres)
U.S. Army Corps of Engineers	0.0108	1.45
Regional Water Quality Control Board	0.0108	1.45
California Department of Fish and Wildlife	0.0108	1.45

Impacts to jurisdictional waters are expected to be minimal due to the fact that the majority of the proposed work within the San Gabriel River Channel will be from a temporary trestle and scaffolding. Permanent impacts would only result from installation of the 24 CISS piles that will be installed for the bridge widening. Temporary impacts would result from equipment and personnel entering and working within the creek to install the casings. Temporary impacts are estimated at the area under the bridge and a 50-foot buffer upstream and downstream from the bridge.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, and/or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The following project features will be implemented as part of the Project:

PF-WQ-1: The proposed Project will comply with the provisions of the Caltrans National Pollutant Discharge Elimination Systems (NPDES) Statewide Storm Water Permit (Order No. 2012-0011-DWQ, as amended by Order WQ 2014-0006-EXEC, Order WQ 2014-0077-DWQ, and Order WQ 2015-0036-EXEC, NPDES No. CAS000003) and the NPDES General Permit for Storm Water Discharges of Stormwater Runoff Associated with Construction Activities (Order No. 2009-0009-DWQ, as amended by 2012-0006DWQ), and any subsequent permits in effect at the time of construction.

PF-WQ-2: A Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) shall be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential to impact water quality. The SWPPP or WPCP shall be prepared per the requirements stated in the NPDES General Permit for Storm Water Discharges of Stormwater Runoff Associated with Construction Activities and any subsequent permit in effect at the time of construction. The SWPPP or WPCP shall identify the sources of pollutants that may affect the quality of storm water and include the construction site BMPs to control pollutants such as sediment control, catch basin inlet protection, construction materials management and non-stormwater BMPs. All construction site BMPs shall follow the latest editions of the Caltrans

Project Planning and Design Guide (PPDG) (2019) and Caltrans Construction Manual (2020). These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-stormwater BMPs.

PF-WQ-3: Caltrans-approved Design Pollution Prevention Best Management Practices (BMPS) shall be implemented to the maximum extent practicable (MEP), consistent with the requirements of the Caltrans permit.

PF-WQ-4: Caltrans-approved Treatment BMPs shall be implemented to the MEP, consistent with the requirements of the Caltrans Permit.

The following avoidance and minimization measures must be followed as part of the Project:

WQ-1: Water Pollution Control Program (WPCP) will be used for this Project since the Disturbed Soil Area (DSA) is less than 1 acre. Project risk levels and erosivity calculations are not required.

WQ-2: The Contractor shall use all appropriate and necessary containment measures for work over waterways to ensure that no construction materials or debris from bridge work enter any waterways. In addition, any contingencies shall be used related to accidental gas or oil releases, as dictated by approved utility relocation plans. Contractor shall use natural oils/lubricants and biodegradable hydraulic fluid when feasible.

WQ-3: The proposed Project area includes activities which will result in impacts to “Waters of the United States” and “Waters of the State”; therefore, a Section 404 of the Clean Water Act Permit will be required from the U.S. Army Corps of Engineers, a Section 401 of the Clean Water Act Permit will be required from the California Regional Water Quality Control Board, and a 1602 Streambed Alteration Agreement will be required from the California Department of Fish and Wildlife prior to commencement of construction. The Project shall adhere to any conditions required by these permits.

WQ-4: Construction site BMPs will be deployed during construction activities to reduce stormwater discharges during construction, and these must be incorporated into the Project specifications. Prior to the start of construction, all drain inlets must be protected with BMPs to prevent construction materials and debris, including methacrylate resin and sandblasting residue, from entering drainages. Temporary Construction BMPs will be required such as wind erosion control, sediment tracking control, street sweeping and vacuuming, stabilized construction roadway, spill prevention control, solid waste management, hazardous waste management, sanitary/septic waste management, material delivery and storage, material use, vehicle and equipment cleaning, vehicle and equipment fueling, and vehicle maintenance.

WQ-5: Temporary construction staging areas and access roads will be used to minimize impacts to USACE, RWCQB, and CDFW jurisdictional waters to the maximum extent feasible and are expected to be restored to pre-project conditions.

2.2.3 GEOLOGY/SOILS/SEISMIC/TOPOGRAPHY

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under the California Environmental Quality Act (CEQA).

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Structures are designed using the Department's Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge's category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities. For more information, please see the Department's Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria.

Affected Environment

The information in this section is based on the Preliminary Geological Data provided by the Caltrans Office of Geotechnical Design South, The City of Long Beach General Plan, The City of Seal Beach General Plan, and the California Department of Conservation.

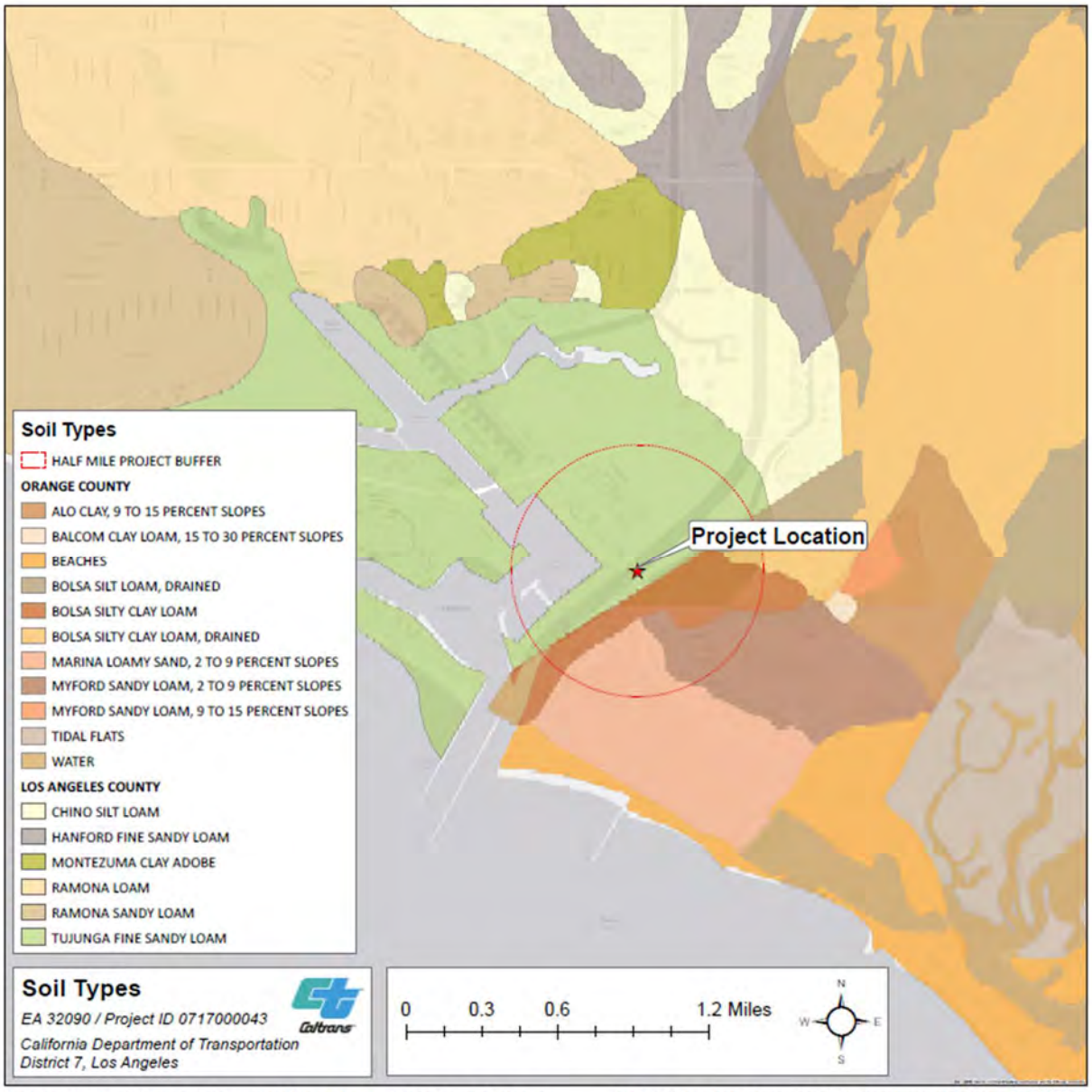
Geologic Formations and Soils

The proposed Project is located in southeastern Los Angeles County and in the western portion of Orange County. Southern California is composed of several tectonic plates that move relative to each other. The primary zone of contact between these plates is the San Andreas Fault zone, which lies about 60 miles north/northeast of the Project site. The Cities of Long Beach and Seal Beach are located in the Los Angeles coastal plain in the Peninsular ranges of southern California. The project area is located in the coastal margin of the Los Angeles Basin, which is underlain by over 15,000 feet of stratified sedimentary rocks of marine origin.

The bridge site is located on marine terrace deposits of recent geologic age. The deposits are composed of 35 feet loose to very loose silty/clayey sand and clayey silt, underlain by about 40 feet dense to very dense gravelly silty sand and intermittent interbeds of medium dense of sandy silt and silty clay to the maximum boring depth of elevation -73 ft. The top 35 feet layers of silty/clayey sand and clayey silt are very compressible and not suitable for foundation support; however, the underlying sand unit have adequate bearing capacity for foundation support.

The low areas now occupied by the Los Angeles and San Gabriel Rivers represent channels that were cut deeply into the marine sediments by ancestral rivers during the lower sea level stand of the last Ice Age. The ground surface elevation surrounding the project site is generally less than 60 feet.

Figure 2.2-2 Geologic Landscape of Project Study Area



Source: Orange County GIS Open Data Portal, Los Angeles County GIS Hub *Map created by Anna Johnson 03-30-22, Department of Environmental Planning*

Seismicity and Faulting

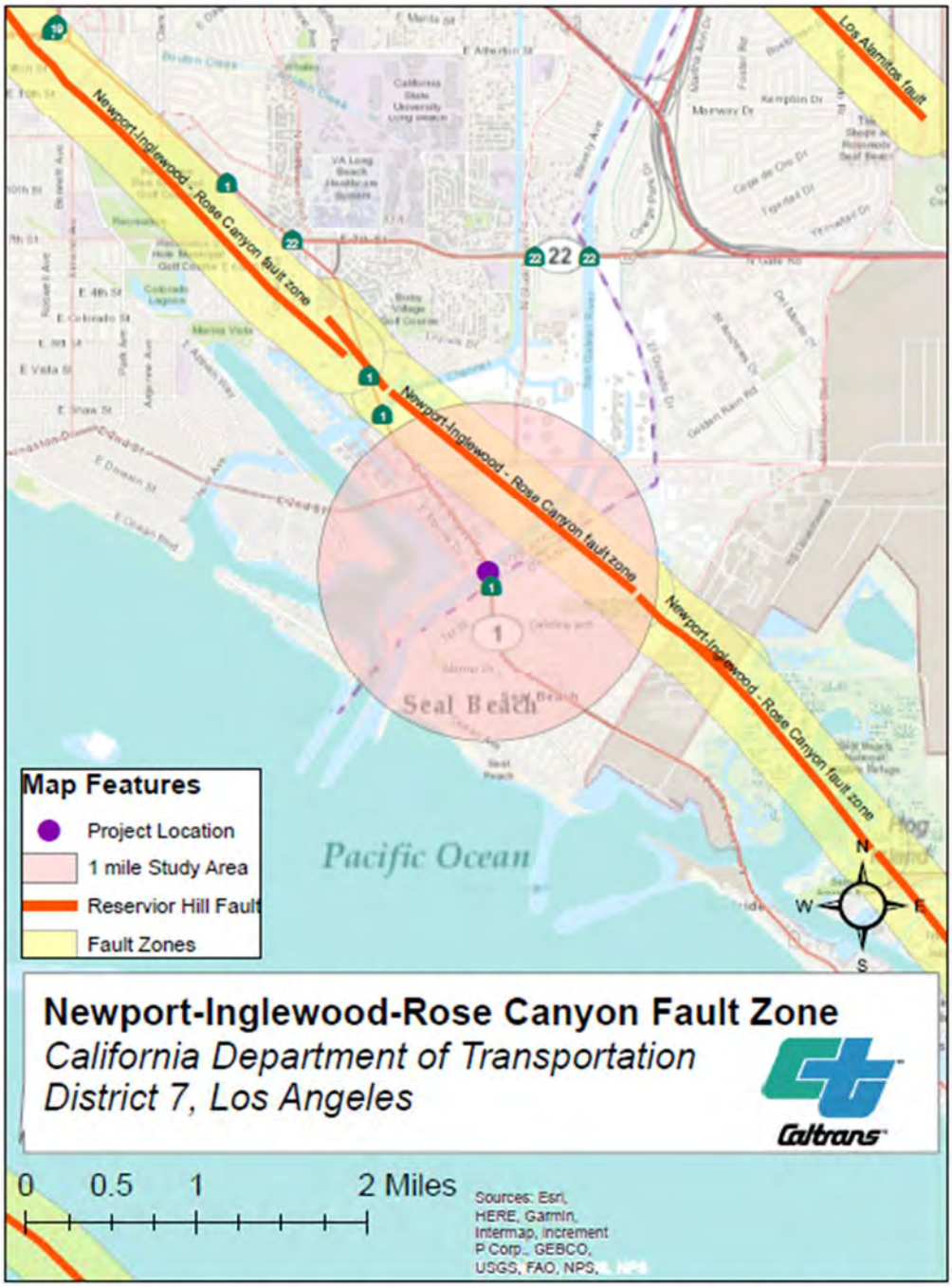
Southern California is located in a seismically active area. An active fault is defined by the State of California as a "…sufficiently active and well-defined fault that has exhibited surface displacement within the last 11,000 years." Among the ten (10) active faults and fault zones within 100 km of the Project site, 3 faults are expected to generate earthquakes of significance. These include the Newport-Inglewood, the Whittier-Elsinore and the Palos Verdes Fault zones.

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The proposed bridge site is not within an Alquist-Priolo Earthquake Fault Zone as established by the California Geological Survey. Based on NEHRP a shear wave velocity (Vs30) of 239 m/s (784 ft./sec) was assumed for the top 100 feet of subsurface profile.

The Design Spectrum as defined in Appendix B of the SDC v.2.0, was determined using the Caltrans ARS Online (v. 3.0.2) web tool. The Design Response Spectrum is the probabilistic response spectrum (return period = 975 years) developed based on the 2014 United State Geological Survey (USGS) National Seismic Hazard Map. Adjustments for near-fault and basin effects were implemented when applicable. Using the ARS Online Tool (v3.0.2), the design Peak Ground Acceleration (PGA) for the wall sites is 0.52g, and the mean magnitude is M=6.67. The mean site-to-source distance for 1.0 second period spectral acceleration is R=13.1 miles.

Figure 2.2-3 depicts the project site in relation to the nearest fault zone. A one-mile buffer has been highlighted around the project site to indicate that the proposed Project site is outside of the Newport-Inglewood-Rose Canyon Fault zone. The potential for ground rupture due to faulting across the project area is low.

Figure 2.2-3 Earthquake Fault Zones Map



Seismic Hazards Program, CA Geological Survey, CA Department of Conservation

Map created by Adam Avila, Division of Environmental Planning, February 14, 2022

Surface Waters and Groundwater

Groundwater was encountered between elevations +1.1 ft. to +2.3 ft. during 1960 field investigation. San Gabriel River flows into the Pacific Ocean at the bridge site. Groundwater level corresponds generally with the elevation of surface water flow within the trapezoidal channel with rip rap sides.

The Project site lies in a 1% annual chance flood zone (100-year floodplain). However, Figure 2.2-4 shows the Project site is in an area with reduced flood risk due to a levee.

Bridge Scour Evaluation / Erosion

The Structure Maintenance Investigation (SMI) report dated February 28, 2000, determined that existing structure is stable for the assessed or calculated scour conditions. This finding was confirmed in March 10, 2016 SMI inspection, which also found channel bottom mostly comprised of silty sand and broken shells. The 2016 investigation also found localized depressions (about 5’ radius x 3’ depth) on upstream nose of Piers 6, 5, 4, 3 (minor) and 2. Pier 7 had scattered cobbles around the southeast area. No exposure or undermining of the footings were observed at all piers.

Liquefaction

Soil liquefaction occurs when saturated loose soils lose their strength due to excess water in the soils. The potential for liquefaction exists when fine silts and sand sit just below the water table. Liquefaction has been documented to affect soils to about 50 feet deep during prolonged periods of ground shaking.

Based on 1964 U.S. Geological Survey’s Seismic Hazard Zones, the bridge site and surrounding has been mapped in liquefiable area with potential for permanent ground displacements**.** Figure 2.2-5 highlights the liquefaction zone. In addition, the City of Long Beach General Plan provides supplemental information on other earthquake related-effects such as

Landslides

Landsliding, either as a direct impact or as an earthquake-induced event, would only occur in close proximity to Landing Hill, due to the practically flat site topography of the Project site.

Tsunami Risk

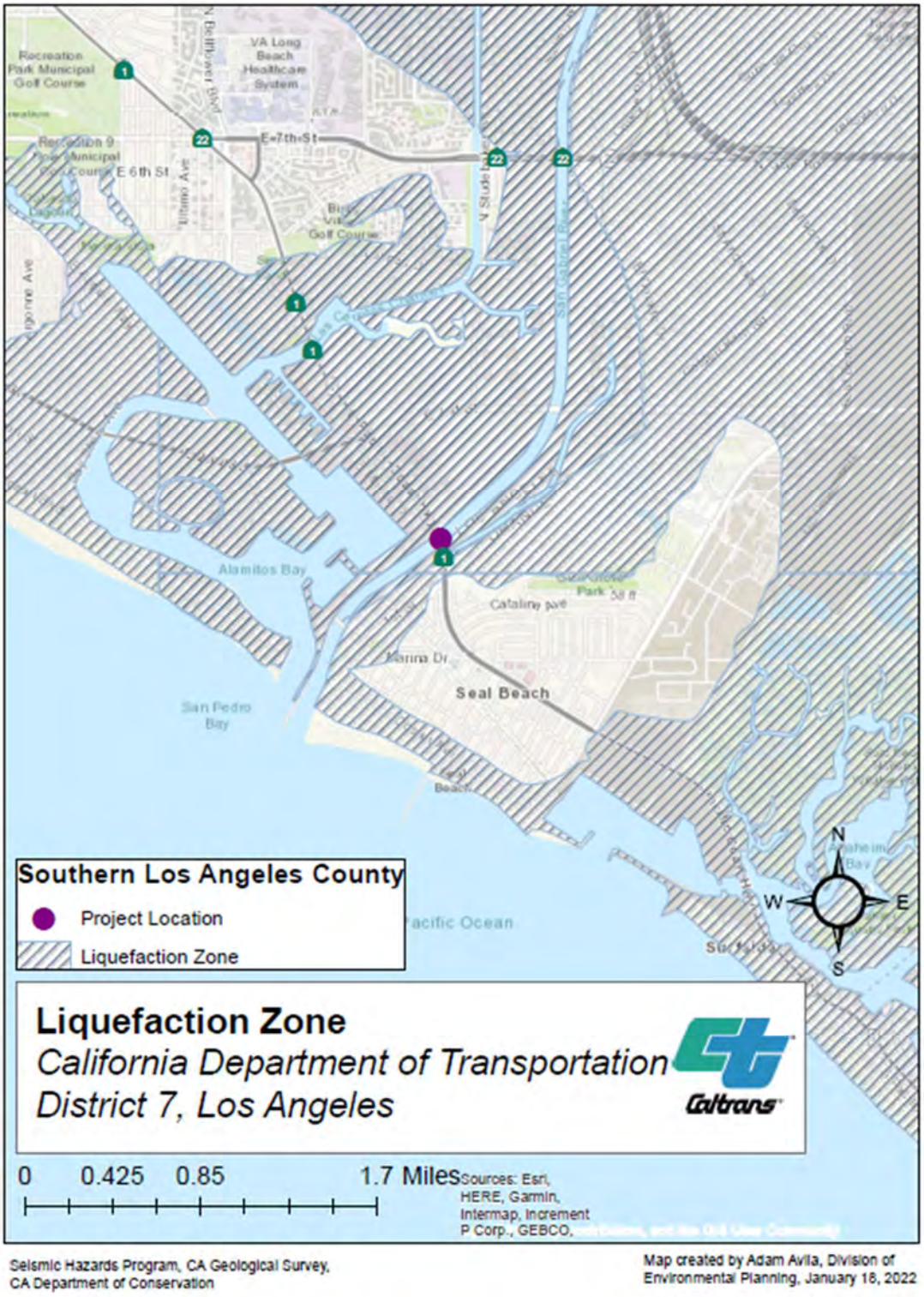
The bridge site is located within a tsunami inundation zone shown in California Official Tsunami Inundation Map for the Ventura County. Based on the above information and per MTD 20-13, a tsunami hazard exists at this site.

Figure 2.2-4 Designated Flood Zones

Source: FEMA Flood Map Service Center

Map created by Anna Johnson 04-05-22, Department of Environmental Planning

Figure 2.2-5 Liquefaction Zone



Environmental Consequences

No Build Alternative

If the bridge is not upgraded, there will be no change to the existing conditions.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Both Build Alternatives would result in a bridge structure that is built to current seismic standards. Geotechnical exploration will be conducted to determine groundwater levels, soil types and strengths, corrosion, susceptibility to liquefaction and settlement, and any areas that require dewatering. Several investigative methods should be used, including but not limited to, geologic mapping, soil borings (mud rotary borings), cone penetration studies, and geophysical studies that evaluate soil liquefaction and shear strength.

Once the required site exploration is completed, the Office of Geotechnical Design will prepare a Geotechnical Report to present the results of the site exploration and make foundation design recommendations in order to facilitate “type selection” for the type of bridge foundation that is appropriate for the given soil/geologic condition.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, and/or mitigation measures are needed.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

All project components will be designed in accordance with standard engineering practices and Caltrans Standard Specifications. Mitigation measures are not required. However, the following project feature will be implemented as part of the project:

PF-GEO-1: Revegetation of graded slopes should be performed to minimize erosion, and runoff should be diverted from each slope face using earthen berms and/or concrete swales at the top of each slope.

2.2.4. PALEONTOLOGY

Regulatory Setting

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils.

A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized projects.

23 United States Code (USC) 1.9(a) requires that the use of Federal-aid funds must be in conformity with all federal and state laws.

23 United States Code (USC) 305 authorizes the appropriation and use of federal highway funds for paleontological salvage as necessary by the highway department of any state, in compliance with 16 USC 431-433 above and state law.

Under California law, paleontological resources are protected by the California Environmental Quality Act (CEQA).

Affected Environment

This section is based on the Combined Paleontological Identification and Evaluation Report (April 2022) prepared for this project. Dr. Sarah Rieboldt, Principal Paleontologist at LSA, prepared this Paleontological Identification Report/Paleontological Evaluation Report (PIR/PER).

Paleontology is the science of analyzing prehistoric plants and animals. Fossils, or Paleontological resources, are defined as any trace of a past life form. Fossils can include remains of large to very small aquatic and terrestrial vertebrates, or remains of plans and animals previously not represented in certain portions of the stratigraphy (layers of rock).

Geologic maps of the Project area were examined in addition to a review of relevant geological and paleontological literature to determine which geologic units are present in the Project area and whether fossils have been recovered from those or similar geologic units elsewhere in the region. In April 2022, a locality search was conducted through the Natural History Museum of Los Angeles County (NHMLAC). On April 26, 2022, LSA paleontologist, Emily Chebul, completed a survey of the Project area.

Geologic mapping shows that the Project area is underlain predominantly by Artificial Fill, with Old Shallow Marine Deposits on Wave-cut Surface at the very southern tip of the Project area. Artificial Fill does not have the potential to contain scientifically important paleontological resources because of its disturbed context, and therefore, is assigned no paleontological sensitivity.

The Project is situated in the Los Angeles Basin and within the Peninsular Ranges Geomorphic Province, which consists of a series of ranges separated by northwest trending valleys and composed of granitic rock intruding into older metamorphic rocks. Soils in the region consist of Tertiary-Quaternary Alluvium composed of sandy loam and clay resulting from cyclical flooding of the Los Angeles, San Gabriel, and Rio Hondo Rivers and their various tributaries.

The Project Area of Potential Effects (APE) sits immediately west of Landing Hill, which is at the southwest end of a chain of hills that were formed by uplifting along the Newport-Inglewood

Fault Zone during the late Pleistocene. Landing Hill consists of old shallow marine deposits overlain with Quaternary nonmarine terrace deposits derived from the Santa Ana and San Gabriel Mountains. Situated between Alamitos Bay on the west and Anaheim Bay on the east, this low-lying prominence reaches “only about 70 feet in height and measur[es] approximately a mile north to south. Roughly bisected by the Seal Beach fault, the hill slopes downward to the south and east but forms a steeper escarpment on the north and west.

Prior to its formation in the late Pleistocene, Alamitos Bay was the location of a low-lying gap/stream channel that drained into the coastal waters. Rising sea levels at the end of the Pleistocene (about 18,000 years ago) resulted in the flooding of the channel and development of a deep embayment that, once sea levels stabilized around 13,000 years ago, fostered a highly dynamic and productive open-water estuarine environment. Such a habitat would have supported a variety of nearshore/coastal fishes such as sharks, rays, croakers, surf perches, and herrings as well as shellfish. With successive depositional events, sediment accumulation and formation of extensive sand bars within the embayment far outpaced seawater transgression. This led to the formation of a lagoon environment about 4,000 years ago and later marsh and tidal mudflats, effectively limiting the availability of shellfish habitats. The current course of the San Gabriel River and its outlet at Alamitos Bay only came into being with the floods of 1867-68.

Environmental Consequences

No Build Alternative

Under the No Build Alternative, none of the proposed improvements to SR-1 at the San Gabriel River Bridge would be constructed. There would be no excavations in the study area and, therefore, there would be no impacts to paleontological resources.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The construction of the Build Alternatives would require ground disturbance, excavation, and modifications to the existing highway and bridge structure. Based on the results of the PIR/PER and consideration of the development methods, no special paleontological situations that would require project redesign to avoid fossil localities or deposits are anticipated for this project. The majority of the Project area is mapped with Artificial Fill, a geologic unit that has no paleontological sensitivity. Excavation for many of the components of this Project, including the retaining walls, guardrails, median, sidewalks, and bike lanes, would have a limited aerial extent and is expected to be relatively shallow, with depths ranging from 1 to 6 feet (ft). As such, excavation for these components is expected to likely remain predominately in Artificial Fill, and any excavation that reaches native deposits would be very minimal in extent. Excavation and other ground disturbance for this Project is unlikely to impact scientifically significant paleontological resources. No additional paleontological studies are recommended.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative
No avoidance, minimization, and/or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The potential to affect paleontological resources is low. However, should they be encountered, the following avoidance and minimization measure will be implemented:

PAL-1: If unanticipated fossils are discovered during construction, all work must halt within a 60-foot radius of the find until it can be evaluated by a qualified paleontologist. Notify the Division of Environmental Planning and Engineer. Do not move paleontological resources or take them from the job site. Work may resume immediately outside that radius.

2.2.5 HAZARDOUS WASTE/MATERIALS

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, and the Resource Conservation and Recovery Act (RCRA) of 1976. The purpose of CERCLA, often referred to as "Superfund," is to identify and cleanup abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for "cradle to grave" regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order (EO) 12088, *Federal Compliance with Pollution Control Standards*, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

Affected Environment

This section of the IS/EA evaluates the potential impacts on hazardous materials, hazardous waste, and contamination associated with implementation of the proposed project alternatives. The analysis present in this section is based on the following technical study: *PAED Hazardous Waste Assessment for Project Report (PR)*, Caltrans Office of Environmental Engineering (December 10, 2021). This assessment generally consists of a project evaluation, a departmental record review, a regulatory agency records review, and a general field visit. The Hazardous Waste Assessment revealed that the main hazardous waste/materials concerns on this project are: seabed sediments, asbestos containing material (ACM), lead based paint (LBP), aerially deposited lead (ADL), Asphalt Concrete (AC) debris, yellow thermoplastic/paint traffic striping, treated wood waste (TWW), and fluorescent and mercury lighting fixtures. See Table 2.2-3 for further details.

Table 2.2-3 – Hazardous Waste/Materials of Concern in the Project Study Area

Hazardous Waste/Materials of Concern	Occurrence
Seabed Sediment	Seabed sediments can be of environmental concern due to accumulation of various hazardous wastes from undocumented discharges into the water. All waste to be disposed must be properly tested by the General Contractor for various contaminants in accordance with the disposal permit requirements in construction.
Asbestos Containing Material (ACM)	Disturbance/removal/replacement of existing bridge railings has the potential to generate ACM hazardous waste.
Lead Based Paint (LBP)	Disturbance/removal/replacement of existing bridge railings has the potential to generate LBP hazardous waste, which may be present in paint materials used.
Aerially Deposited Lead (ADL)	Unpaved soils in the project vicinity have the potential to be contaminated with ADL due to historical use of lead containing fuel.
Yellow Thermoplastic/Paint Traffic Striping	Yellow thermoplastic/paint traffic striping that needs to be removed as a result of the proposed Project may contain concentrations of lead and chromium which are considered hazardous.

Treated Wood Waste (TWW)	There is a potential for the removal and disposal of metal beam guardrail or signs with wood posts. These wood posts are assumed to be treated with chemical preservatives such as arsenic, chromium, copper, creosote, and pentachlorophenol. These posts are considered hazardous waste and should be handled as such.
Groundwater	Groundwater will be encountered during construction that requires dewatering. Groundwater testing will be conducted during the PS&E phase to evaluate soil and groundwater conditions for construction waste handling/management.
Asphalt Concrete (AC) Debris	Cold planing of existing AC pavement along the mainline and shoulder will create AC debris. Combined AC debris and existing traffic stripe/pavement marking paint residue may generate hazardous waste.
Lighting Fixtures	Removal of existing light fixtures on traffic signal/light requires disposal of electrical equipment containing hazardous materials.

All parcels acquired for the proposed Project will require a Site Investigation in order to determine the presence of any potential contaminants. Parcels acquired must meet Caltrans' requirements for the acquisition on uncontaminated property.

Environmental Consequences

No Build Alternative

The No Build Alternative would not change the existing physical environment and therefore would not result in any impacts related to hazardous waste and materials.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Seabed Sediment

Seabed sediments can be of environmental concern due to accumulation of various hazardous wastes from undocumented discharges into the water. A waste disposal permit for the Caltrans General Contractor (GC) will be required. All waste to be disposed must be properly tested by the GC for various contaminants in accordance with the disposal permit requirements in construction. The GC will also be required to submit a waste discharge summary report to the Caltrans Engineer during construction. The Office of Environmental Engineering (OEE) will coordinate with project environmental planner to aid in acquiring necessary and relevant permits

during the PS&E phase of the project, and will provide appropriate specifications to be included in the project bid document.

Asbestos Containing Material (ACM) and Lead Based Paint (LCB) Survey

The Project may disturb existing bridge railings for the proposed improvements. The U.S. Environmental Protection Agency (US EPA) regulates stationary sources of asbestos under the National Emission Standards for Hazardous Air Pollutants (NESHAP), Title 40 CRF Part 61, Subpart M. The US EPA delegated authority to 19 out of 35 air districts in California to regulate Asbestos NESHAP. The California Air Resources Board (CARB) regulates Asbestos NESHAP for the remaining 16 non-delegated air districts that do not have an asbestos program in place.

In the event the existing bridge railings will be disturbed/removed/replaced, an ACM and LCB survey will be required in compliance with AQMP/NESHAP notification requirements. OEE recommends a bridge paint and ACM survey to be performed during design phase (PS&E) to determine the appropriate handling procedure in conformance with State and Federal laws and regulations.

Aerially Deposited Lead (ADL)

ADL from the historical use of leaded gasoline exists along roadways throughout California. This Project will involve installation of temporary stationary mounted construction area signposts (for traffic control/staging) at unpaved areas.

All soil disturbed must remain in the immediate area of disturbance and not be transported elsewhere. Health and Safety precautions and dust control for hazardous waste must be implemented. It is important to notify the GC that lead is present and allow for preparation of task-specific Lead Compliance Plan (LCP) and lead awareness training as required by 8CCR, Section 1532.1, “Lead”, Cal-OSHA Construction Safety Order, and Caltrans Standard Specifications.

Yellow Thermoplastic Striping and Pavement Markings with Hazardous Waste Residue

The existing yellow thermoplastic painted and/or lead-based painted traffic stripe and pavement markings will be disturbed/removed as part of the project improvements. Yellow thermoplastic painted traffic stripe and/or pavement marking contain elevated lead and chromium, which is regulated as California Hazardous Waste (non-RCRA waste). Residue produced when these materials are disturbed may contain heavy metals in concentration that exceed hazardous waste thresholds established by the California Code of Regulations (CCR) and may produce toxic fumes when heated. Removal of such material shall be properly collected, stored, transported, and disposed of in accordance with State and Federal guidelines. It is Caltrans policy to require the GC to prepare a task-specific LCP and Debris Containment and Disposal Work Plan (WP) as required by Caltrans Standard Specification and 8CCR. The LCP and WP are prepared to address worker safety and waste handling/management procedure of the generated residue from the removal operation.

Non-Yellow Thermoplastic Striping and Pavement Markings (Non-Hazardous)

Residues from the removal of existing non-yellow (i.e. white, blue, etc.) thermoplastic painted and/or lead-based painted traffic stripe and/or pavement marking at the intersection can be classified as non-hazardous waste and disposed of at a permitted non-hazardous waste disposal facility (Class II or III facilities). However, the GC is required to develop a task-specific LCP and training program in conformance with 8CCR and Caltrans Standard Specifications, prior to the start of the removal operation.

Treated Wood Waste (Removal of Existing Metal Beam Guard Railings)

Treated Wood Waste (TWW) can occur as existing wooden posts for metal beam guard railings that are removed. The wood product is typically treated with preserving chemicals that protect against insect attack and fungal decay. These chemicals may be hazardous (carcinogenic) and include, but are not limited to, arsenic, chromium, copper, creosote, and pentachlorophenol. The Department of Toxic Substances Control (DTSC) requires that TWW is either a hazardous waste, or if not tested, the waste generator may presume that TWW is a hazardous waste (to avoid the time and expense involved in completing laboratory testing) and manage the waste by Alternative Management Standards (AMS). The AMS lessen storage requirements, extend accumulation periods, allow shipments of presumed hazardous waste TWW without manifest and registered hazardous waste haulers, and permit disposal at specific non-hazardous waste landfills.

Asphalt Concrete (AC) Pavement Cold Planing, Overlay, and Grinding Work

The Project proposes to cold plane of the existing AC pavement along the mainline and shoulder roadway and overlay with RHMA-G. The combined AC debris and existing traffic stripe/pavement marking paint residue potentially may generate a hazardous waste condition if lead and total chromium concentrations exceed the California Hazardous Waste regulated threshold levels. OEE recommends that cost estimate for removal of traffic stripe and/or pavement marking shall be provided. OEE staff will evaluate the lead content based on the grinded residue containing both concrete and/or AC with yellow lead based paint and/or thermoplastic paint when the construction plans are available to determine the disposal requirements. Regardless of the disposal requirements, the Contractor is required to prepare a task-specific Lead Compliance Plan (LCP) as required in Title 8 California Code of Regulations (8CCR); Section 1532.1, “Lead” and Cal-OSHA Construction Safety Order.

Removal of Lighting Fixtures (including ballasts containing PCB and Fluorescent Tubes)

Removal of existing light fixtures on traffic signal/light requires disposal of electrical equipment containing hazardous materials. The fluorescent (including ballasts containing PCB and fluorescent tubes) and mercury lighting fixtures (including lamps and housing) will be removed and requires special handling and waste management. Disposal of fluorescent light ballasts containing PCBs under 22CCR § 67426.1 et seq. Ballasts must be packaged and transported by a certified hazardous waste transporter with a current DTSC registration certificate and documentation of compliance with the California Highway Patrol Biennial Basic Inspection of Terminals Program. The hazardous waste transporter must transport the ballasts to a facility permitted for hazardous waste disposal by DTSC. Transport mercury lamps and fluorescent tubes, bulbs, and lamps to an appropriately permitted recycling or disposal facility.

There is potential for exposure to general hazardous waste/material of concern during construction. Soil excavation and earth-moving activities associated with the Build Alternatives could expose workers to contaminants associated with yellow thermoplastic traffic striping, aerially deposited lead (ADL), treated wood waste (TWW), and electrical equipment containing hazardous materials. Structural demolition work associated with the Build Alternative has the potential to expose workers to contaminants associated with asbestos containing materials (ACM) and lead based paint (LBP). All parcels will require a Site Investigation (SI) during the PS&E phase of the project to determine actual levels of contamination so that provisions can be made for handling and disposal of the contaminated soils.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, and/or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The following project features pertaining to hazardous waste matters will be implemented as part of the proposed project:

PF-HAZ-1: Site investigations performed at the properties for the Project will be completed during the PS&E phase to determine whether more extensive subsurface investigation will be needed.

PF-HAZ-2: If hazardous materials, contamination, or sources are suspected or identified during Project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the Caltrans Construction Manual (July 2019). Adequate protection for construction workers will be provided with the implementation of a Health and Safety Plan and Soil Management Plan.

PF-HAZ-3: If hazardous materials are discovered, the construction contractor will remove and properly dispose of any materials in accordance with the Caltrans Construction Manual (July 2019), Chapter 7, Section 7-107, Hazardous Waste and Contamination.

PF-HAZ-4: Lead Compliance Plan shall be prepared prior to the start of construction activities.

The following avoidance and minimization measures will be implemented as part of the proposed project:

HAZ-1: Waste disposal permit for Caltrans General Contractor (GC) will be required. All waste to be disposed must be properly tested by the GC for various contaminants in accordance with the disposal permit requirements in construction. The GC will also be required to submit waste discharge summary report to Caltrans Engineer during construction. OEE will coordinate with project environmental planner to aid in acquiring necessary permits during the PS&E phase, and will provide appropriate specifications to be included in the project bid document.

HAZ-2: Any soil generated at the unpaved area in the parcels shall be handled as California hazardous waste (non-RCRA) and the material shall be managed and disposed as hazardous waste at a permitted Class I disposal facility within the State of California.

HAZ-3: In the event the existing bridge railings will be disturbed/removed/replaced, an ACM and LCB survey will be required in compliance with AQMP/NESHAP notification requirements. OEE recommends a bridge paint and ACM survey to be performed during design phase (PS&E) to determine the appropriate handling procedure in conformance with State and Federal laws and regulations.

HAZ-4: All soil disturbed must remain in the immediate area of disturbance and not be transported elsewhere. Health and Safety precautions and dust control for hazardous waste must be implemented. It is important to notify the GC that lead is present and allow for preparation of task-specific Lead Compliance Plan (LCP) and lead awareness training as required by 8CCR, Section 1532.1, “Lead”, Cal-OSHA Construction Safety Order, and Caltrans Standard Specifications.

HAZ-5: The combined AC debris and existing traffic stripe/pavement marking paint residue potentially may generate a hazardous waste condition if lead and total chromium concentrations exceed the California Hazardous Waste regulated threshold levels. OEE recommends that cost estimate for removal of traffic stripe and/or pavement marking shall be provided. OEE staff will evaluate the lead content based on the grinded residue containing both concrete and/or AC with yellow lead based paint and/or thermoplastic paint when the construction plans are available to determine the disposal requirements. Regardless of the disposal requirements, the Contractor is required to prepare a task-specific Lead Compliance Plan (LCP) as required in Title 8 California Code of Regulations (8CCR); Section 1532.1, "Lead" and Cal-OSHA Construction Safety Order.

HAZ-6: Yellow thermoplastic painted traffic stripe and/or pavement marking contain elevated lead and chromium, which is regulated as California Hazardous Waste (non-RCRA waste). Residue produced when these materials are disturbed may contain heavy metals in concentration that exceed hazardous waste thresholds established by the California Code of Regulations (CCR) and may produce toxic fumes when heated. Removal of such material shall be properly collected, stored, transported, and disposed of in accordance with State and Federal guidelines. It is Caltrans policy to require the GC to prepare a task-specific LCP and Debris Containment and Disposal Work Plan (WP) as required by Caltrans Standard Specification and 8CCR. The LCP and WP are prepared to address worker safety and waste handling/management procedure of the generated residue from the removal operation.

HAZ-7: Residues from the removal of existing non-yellow (i.e. white, blue, etc.) thermoplastic painted and/or lead-based painted traffic stripe and/or pavement marking at the intersection can be classified as non-hazardous waste and disposed of at a permitted non-hazardous waste disposal facility (Class II or III facilities). However, the GC is required to develop a task-specific LCP and training program in conformance with 8CCR and Caltrans Standard Specifications, prior to the start of the removal operation.

HAZ-8: Treated Wood Waste (TWW) can occur as existing wooden posts for metal beam guard railings that are removed. The wood product is typically treated with preserving chemicals that protect against insect attack and fungal decay. These chemicals may be hazardous (carcinogenic) and include, but are not limited to, arsenic, chromium, copper, creosote, and pentachlorophenol. The Department of Toxic Substances Control (DTSC) requires that TWW is either a hazardous waste, or if not tested, the waste generator may presume that TWW is a hazardous waste (to avoid the time and expense involved in completing laboratory testing) and manage the waste by Alternative Management Standards (AMS). The AMS lessen storage requirements, extend accumulation periods, allow shipments of presumed hazardous waste TWW without manifest and registered hazardous waste haulers, and permit disposal at specific non-hazardous waste landfills.

HAZ-9: Removal of existing light fixtures on traffic signal/light requires disposal of electrical equipment containing hazardous materials. The fluorescent (including ballasts containing PCB and fluorescent tubes) and mercury lighting fixtures (including lamps and housing) will be removed and requires special handling and waste management. Disposal of fluorescent light ballasts containing PCBs under 22CCR § 67426.1 et seq. Ballasts must be packaged and transported by a

certified hazardous waste transporter with a current DTSC registration certificate and documentation of compliance with the California Highway Patrol Biennial Basic Inspection of Terminals Program. The hazardous waste transporter must transport the ballasts to a facility permitted for hazardous waste disposal by DTSC. Transport mercury lamps and fluorescent tubes, bulbs, and lamps to an appropriately permitted recycling or disposal facility.

2.2.6 AIR QUALITY

Regulatory Setting

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act (CCAA) is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM) —which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM_{10}) and particles of 2.5 micrometers and smaller ($PM_{2.5}$), Lead (Pb), and sulfur dioxide (SO_2). In addition, state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H_2S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety, and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel "Conformity" requirement under the FCAA also applies.

Conformity

The conformity requirement is based on FCAA Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. "Transportation Conformity" applies to highway and transit projects and takes place on two levels: the regional (or planning and programming) level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and "maintenance" (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and in some areas (although not in California), sulfur dioxide (SO_2). California has nonattainment or maintenance areas for all of these transportation-related "criteria pollutants" except SO_2, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP) and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the FCAA and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA) make the determinations that the RTP and FTIP are in conformity with the

SIP for achieving the goals of the FCAA. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept and scope and the "open-to-traffic" schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP; the project has a design concept and scope[4] that has not changed significantly from those in the RTP and TIP; project analyses have used the latest planning assumptions and EPA-approved emissions models; and in PM areas, the project complies with any control measures in the SIP. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM nonattainment or maintenance areas to examine localized air quality impacts.

Affected Environment

Information for this section was gathered from the Air Quality Technical Memorandum (April 2022).

Climate, Meteorology, and Topography

Meteorology (weather) and terrain can influence air quality. Certain weather parameters are highly correlated to air quality, including temperature, the amount of sunlight, and the type of winds at the surface and above the surface. Winds can transport ozone and ozone precursors from one region to another, contributing to air quality problems downwind of source regions. Furthermore, mountains can act as a barrier that prevents ozone from dispersing.

The project is located in Long Beach and Seal Beach, which is situated in the South Coast Air Basin (SCAB) and is a part of the South Coast Air Quality Management District (SCAQMD).

The Cities of Long Beach and Seal Beach are located on the coastal lowland areas in the Los Angeles Basin, a coastal plain with connecting broad valleys and low hills that covers an approximately 6,745 square mile area bounded by the Pacific Ocean to the south. SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernadino Counties. The climate near the Project study area can be classified as Mediterranean with dry hot summers and relatively cool moist winters. Skies are mostly clear from the midsummer months through autumn. Like many coastal communities, heavy cloud cover and fog occur primarily during the spring and early summer months when stratus clouds associated with the marine layer move in from the west.

The Basin's severe air pollution problem is a consequence of the combination of emissions from the nation's second-largest urban area, mountainous terrain surrounding the basin that traps pollutants as they are pushed inland with the sea breeze, and meteorological conditions that are adverse to the dispersion of those emissions. The average wind speed for Los Angeles is the lowest of the nation's 10 largest urban areas. In addition, the summertime daily maximum mixing heights (an index of how well pollutants can be dispersed vertically in the atmosphere) in Southern California are the lowest, on average, in the United States, due to strong temperature inversions in the lower atmosphere that effectively trap pollutants near the surface. The Southern California area is also an area with abundant sunshine, which drives the photochemical reactions that form pollutants (e.g. O3 and a significant portion of PM2.5).

In the Basin, high concentrations of O3 are normally recorded during the late spring and summer months, when more intense sunlight drives enhanced photochemical reactions. In contrast, higher concentrations of CO are generally recorded in late fall and winter, when nighttime radiation inversions trap the emissions at the surface. High Inhalable Particulate Matter (PM10) and PM2.5 concentrations can occur throughout the year, but occur most frequently in fall and winter in the Basin. Although there are changes in emissions by season, the observed variations in pollutant concentrations are largely a result of seasonal differences in weather conditions.

Almost all rainfall in Los Angeles County falls during the winter/early spring (November through April). Summer rainfall is normally restricted to scattered thundershowers in lower elevations and somewhat heavier activity in the mountains.

Attainment Status

Criteria pollutants are defined as those pollutants for which federal and state governments have established ambient air quality standards. These standards are based on health criteria for outdoor concentrations to protect public health and prevent degradation of the environment. The Clean Air Act requires the U.S. EPA to set National Ambient Air Quality Standards (NAAQS) for six criteria air contaminants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, lead, and sulfur dioxide. It also permits states to adopt additional or more protective air quality standards if needed. California has set standards for certain pollutants. Table 2.2-4 documents the current air quality standards for California while Table 2.2-6 summarizes the sources and health effects of the six criteria pollutants and pollutants regulated in the state of California.

Table 2.2-4 California Ambient Air Quality Standards

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (5/4/16)**

Regional air quality is defined by whether the area has attained or not attained State and federal standards, as determined by monitoring. Areas that are in nonattainment are required to prepare plans and implement measures that will bring the region into attainment. When an area has been reclassified from nonattainment to attainment for a federal standard, the status is identified as “maintenance”. When the area is deemed a maintenance area there must be a measure and a plan established that will preserve the region in attainment for the following ten years. Table 2.2-5 below lists the current attainment designations for the SCAB.

The USEPA designates an area as “Unclassified” if, based on available information, it cannot be classified as either meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant. For the California Air Resources Board (CARB), an “Unclassified” designation indicates that the air quality data for the project area are incomplete and do not support a designation of attainment or nonattainment. Attainment status for all the criteria pollutants in the project area are summarized in Table 2.2-5 below. Table 2.2-6 lists the air pollutant effects and sources.

Table 2.2-5 State and Federal Criteria Air Pollutant Standards and Status

Pollutant	Averaging Time	State Standard [i]	Federal Standard [ii]	State Project Attainment Status	Federal Project Area Attainment Status
O_3 [iii]	1 hour	0.09 ppm [iv]	N/A	Nonattainment	N/A
O_3	8 hours	0.070 ppm	0.070 ppm (4^{th} highest in 3 years)	Nonattainment	Nonattainment (Extreme)
CO [v]	1 hour	20 ppm	35 ppm	Attainment	Attainment (Maintenance)
CO	8 hours	9.0 ppm	9 ppm	Attainment	Attainment (Maintenance)
CO	8 hours (Lake Tahoe)	6 ppm	N/A		N/A
PM_{10} [vi]	24 hours	50 µg/m^3 [vii]	150 µg/m^3 (expected number of days above standard < or equal to 1)	Nonattainment	Attainment (Maintenance)
PM_{10}	Annual	20 µg/m^3	N/A	Nonattainment	N/A
$PM_{2.5}$ [viii]	24 hours	N/A	35 µg/m^3 [vi]	N/A	Nonattainment (Serious)
$PM_{2.5}$	Annual	12 µg/m^3	12.0 µg/m^3	Nonattainment	Attainment
NO_2	1 hour	0.18 ppm	0.100 ppm [ix]	Attainment	N/A (attained)
NO_2	Annual	0.030 ppm	0.053 ppm	Attainment	Attainment (Maintenance)
SO_2 [x]	1 hour	0.25 ppm	0.075 ppm (99^{th} percentile over 3 years)	Attainment	Designations pending
SO_2	3 hours	N/A	0.5 ppm [xi]	N/A	Designations pending
SO_2	24 hours	0.04 ppm	0.14 ppm (for certain areas)	Attainment	Unclassifiable/ Attainment
SO_2	Annual	N/A	0.030 ppm (for certain areas)	N/A	Unclassifiable/ Attainment
Pb [xii]	Monthly	1.5 µg/m^3	N/A	Nonattainment	N/A
Pb	Calendar Quarter	N/A	1.5 µg/m^3 (for certain areas)	N/A	Nonattainment
Pb	Rolling 3-month average	N/A	0.15 µg/m^3 [xiii]	N/A	Nonattainment (Partial)
Sulfates	24 hours	25 µg/m^3	N/A	Attainment	N/A
H_2S	1 hour	0.03 ppm	N/A	Attainment	N/A
Visibility Reducing Particles (VRP) [xiv]	8 hours	Visibility of 10 miles or more (Tahoe: 30 miles) at relative humidity less than 70 %	N/A	Unclassifiable/ Attainment	N/A

Pollutant	Averaging Time	State Standard [i]	Federal Standard [ii]	State Project Attainment Status	Federal Project Area Attainment Status
Vinyl Chloride [xii]	24 hours	0.01 ppm	N/A	Attainment	N/A

Adapted from the California ARB Air Quality Standards chart

Greenhouse Gases and Climate Change: Greenhouse gases do not have concentration standards for that purpose. Conformity requirements do not apply to greenhouse gases.

[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[1] Federal standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[1] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. Transportation conformity applies in newly designated nonattainment areas for the 2015 national 8-hour ozone primary and secondary standards on and after August 4th, 2019 (see Transportation Conformity Guidance for 2015 Ozone NAAQS Nonattainment Areas).

[1] ppm = parts per million

[1] Transportation conformity requirements for CO no longer apply after June 1, 2018 for the following California Carbon Monoxide Maintenance Areas (see U.S. EPA CO Maintenance Letter).

[1] On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m^3 to 12 µg/m^3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[1] µg/m^3 = micrograms per cubic meter

[1] The 65 µg/m^3 PM2.5 (24-hr) NAAQS was not revoked when the 35 µg/m^3 NAAQS was promulgated in 2006. The 15 µg/m^3 annual PM2.5 standard was not revoked when the 12 µg/m^3 standard was promulgated in 2012. Therefore, for areas designated nonattainment or nonattainment/maintenance for the 1997 and or 2006 PM2.5 NAAQS, conformity requirements still apply until the NAAQS are fully revoked.

[1] Final 1-hour NO2 NAAQS published in the Federal Register on 2/9/2010, effective 3/9/2010. Initial area designation for California (2012) was attainment/unclassifiable throughout. Project-level hot spot analysis requirements do not currently exist. Near-road monitoring starting in 2013 may cause re-designation to nonattainment in some areas after 2016.

[1] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[1] Secondary standard, the levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant rather than health. Conformity and environmental analysis address both primary and secondary NAAQS.

[1] The ARB has identified vinyl chloride and the particulate matter fraction of diesel exhaust as toxic air contaminants. Diesel exhaust particulate matter is part of PM_{10} and, in larger proportion, $PM_{2.5}$. Both the ARB and U.S. EPA have identified lead and various organic compounds that are precursors to ozone and $PM_{2.5}$ as toxic air contaminants. There are no exposure criteria for adverse health effect due to toxic air contaminants, and control requirements may apply at ambient concentrations below any criteria levels specified above for these pollutants or the general categories of pollutants to which they belong.

[1] Lead NAAQS are not considered in Transportation Conformity analysis.

[1] In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table 2.2-6 Air Pollutant Effects and Sources

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
Ozone (O_3)	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known toxic air contaminants. Biogenic VOC may also contribute.	Low-altitude ozone is almost entirely formed from reactive organic gases/volatile organic compounds (ROG or VOC) and nitrogen oxides (NOx) in the presence of sunlight and heat. Common precursor emitters include motor vehicles and other internal combustion engines, solvent evaporation, boilers, furnaces, and industrial processes.
Carbon Monoxide (CO)	CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO also is a minor precursor for photochemical ozone. Colorless, odorless.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.
Respirable Particulate Matter (PM_{10})	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many toxic & other aerosol and solid compounds are part of PM_{10}.	Dust- and fume-producing industrial and agricultural operations; combustion smoke & vehicle exhaust; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources.
Fine Particulate Matter ($PM_{2.5}$)	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter – a toxic air contaminant – is in the $PM_{2.5}$ size range. Many toxic &other aerosol and solid compounds are part of $PM_{2.5}$	Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical and photochemical reactions involving other pollutants including NOx, sulfur oxides (SOx), ammonia, and ROG.
Nitrogen Dioxide (NO_2)	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain & nitrate contamination of stormwater. Part of the "NOx" group of ozone precursors.	Motor vehicles and other mobile or portable engines, especially diesel; refineries; industrial operations.
Sulfur Dioxide (SO_2)	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used.
Lead (Pb)	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also a toxic air contaminant and water pollutant.	Lead-based industrial processes like battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from older gasoline use may exist in soils along major roads.
Sulfates	Premature mortality and respiratory effects. Contributes to acid rain. Some toxic air contaminants attach to sulfate aerosol particles.	Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas.

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
Hydrogen Sulfide (H_2S)	Colorless, flammable, poisonous. Respiratory irritant. Neurological damage and premature death. Headache, nausea. Strong odor.	Industrial processes such as: refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs.
Visibility Reducing Particles (VRP)	Reduces visibility. Produces haze. NOTE: not directly related to the Regional Haze program under the Federal Clean Air Act, which is oriented primarily toward visibility issues in National Parks and other "Class I" areas. However, some issues and measurement methods are similar.	See particulate matter above. May be related more to aerosols than to solid particles.
Vinyl Chloride	Neurological effects, liver damage, cancer. Also considered a toxic air contaminant.	Industrial processes

Sensitive Receptors

SCAQMD defines a sensitive receptor as a person in the population who is particularly susceptible to health problems resulting from exposure to air pollutants (e.g. persons at schools, playgrounds, childcare centers, hospitals, retirement homes, or residences)(SCAQMD 2005a). Residential areas are considered sensitive to air pollution because residents, including children and the elderly, tend to be at home for extended periods of time, resulting in sustained exposure to pollutants.

The existing land uses surrounding the Project site include a mix of open space, residential, and commercial uses. The sensitive residential receptors are located on the southwest side of the Project site (see Figure 2.1-2 Land Use).

Construction Emissions

Site preparation and roadway construction will involve clearing, cut-and-fill activities, grading, removing or improving existing roadways, and paving roadway surfaces. During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, NOx, VOCs, directly emitted PM10 and PM2.5, and toxic air contaminants (TACs) such as diesel exhaust particulate matter. Construction activities are expected to increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site.

The proposed Project is located in Los Angeles County within the South Coast Air Basin (SCAB) and is required to comply with the South Coast Air Quality Management District (SCAQMD) Fugitive Dust Rule (Rule 403) to minimize emission of fugitive dust during construction activities.

Construction emissions are estimated for the proposed Project based on project construction activities data provided by Caltrans Design Branch, combined with emission factors from the EMFAC2017 and Construction Emissions Tool 2020 (CAL-CET2020) version 1.0. CAL-CET2020 is a Caltrans-developed spreadsheet tool that estimates pollutant emissions from

activities occurring during construction of transportation projects. Construction-related emissions for the proposed Project are presented in Table 2.2-7 for Build Alternative 2 and Table 2.2-8 for Build Alternative 3. The emissions presented are based on the best information available at the time of calculations and represent daily and annual average construction emissions that would be generated from across the Project construction site.

Construction of Alternative 2 would generate a total of 0.160 tons of PM10 and 0.155 tons of PM2.5 emissions from all phases of activities, while Alternative 3 would generate a total of 0.196 tons of PM10 and 0.191 tons of PM2.5 emissions.

Table 2.2-7 Build Alternative 2 Construction Emissions Estimate

Table 1. Alternative 2 Construction Emissions Estimate

Project Phases	Total Emissions (tons)					
	ROG	CO	NOx	PM_{10}	$PM_{2.5}$	CO_2e
Land Clearing/Grubbing	0.004	0.025	0.030	0.002	0.002	7
Roadway Excavation & Removal	0.031	0.195	0.219	0.017	0.016	47
Structural Excavation & Removal	0.037	0.113	0.233	0.014	0.013	61
Base/Subbase/Imported Borrow	0.077	0.525	0.543	0.042	0.041	112
Structure Concrete	0.178	0.552	0.965	0.058	0.056	216
Paving	0.011	0.034	0.085	0.006	0.006	16
Drainage/Environment/Landscaping	0.017	0.049	0.113	0.009	0.009	21
Traffic Signalization/Signage/Striping/Painting	0.025	0.119	0.229	0.012	0.012	84
Project Total	0.381	1.613	2.417	0.160	0.155	564

Table 2.2-8 Build Alternative 3 Construction Emissions Estimate

Table 2. Alternative 3 Construction Emissions Estimate

Project Phases	Total Emissions (tons)					
	ROG	CO	NOx	PM_{10}	$PM_{2.5}$	CO_2e
Land Clearing/Grubbing	0.006	0.031	0.037	0.003	0.002	9
Roadway Excavation & Removal	0.038	0.240	0.271	0.021	0.020	58
Structural Excavation & Removal	0.046	0.140	0.288	0.017	0.016	76
Base/Subbase/Imported Borrow	0.095	0.648	0.669	0.052	0.050	138
Structure Concrete	0.220	0.680	1.188	0.071	0.070	265
Paving	0.014	0.042	0.105	0.008	0.007	20
Drainage/Environment/Landscaping	0.021	0.061	0.140	0.011	0.011	27
Traffic Signalization/Signage/Striping/Painting	0.031	0.146	0.280	0.015	0.014	102
Project Total	0.470	1.988	2.978	0.196	0.191	694

Mobile Sources Air Toxics (MSATs)

Mobile Source Air Toxics are airborne pollutants often emitted from mobile sources such as diesel fueled engines in vehicles. These air toxics may pose a serious health hazard to human health. Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. EPA regulate 188 air toxics, also known as hazardous air pollutants. In the EPA's latest final rule on the control of hazardous air pollutants from mobile sources, which are listed in their integrated Risk Information System (IRIS) (https://www.epa.gov/iris). From this list of 93 compounds, EPA has

identified nine as priority MSATs. The high priority of these nine MSATs was based on EPA's 2011 National Air Toxics Assessment (NATA) that showed these toxics are among the national and regional-scale cancer risk drivers or contributors and non-hazard contributors. These nine MSATs are listed as follows:

- Acrolein
- Acetaldehyde
- Benzene
- 1,3-butadiene
- Diesel particulate matter (diesel PM)
- Ethylbenzene
- Formaldehyde
- Naphthalene
- Polycyclic organic matter (POM)

Based on a comparison of the proposed scope with the different categories identified in the Interim MSAT Guidance, the Project meets the criteria for Category 1 MSAT analysis. Pursuant to FHWA/'s Updated Interim Guidance on MSAT analysis in NEPA documents dated October 18, 2016, projects that are categorically excluded pursuant to 23 CFR 771.117(c) or are exempt under the Clean Air Act pursuant to 40 CFR 93.126, do not require an analysis or discussion of MSAT. This Project is deemed exempt from conformity requirements pursuant to 40 CFR 93.126. The proposed Project is deemed listed under the subtitle "Safety" and classification "Widening narrow pavements or reconstructing bridges (no additional travel lanes)." Therefore, this Project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. As such, this Project will not result in change in traffic volumes, vehicle mix, or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the No-Build Alternative.

Moreover, Environmental Protection Agency (EPA) regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 45 percent (Updated Interim Guidance on MSAT in NEPA Documents, FHWA, October 12, 2016). This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

Environmental Consequences

No Build Alternative

The No Build Alternative would make no project improvements. Regional plans and programs such as the 2020-2045 RTP/SCS and 2019 FTIP would not be fulfilled.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Regional Transportation Conformity Requirements

The currently approved regional plan and program are the 2020 RTP/Sustainable Communities Strategy (SCS) and the 2019 FTIP. SCAG adopted the 2020 RTP/SCS on May 7, 2020. The FHWA and FTA approved the RTP/SCS on June 5, 2020. The 2019 FTIP was adopted by SCAG on September 17, 2018 and was federally approved on December 17, 2018. The most recent Amendment to the 2019 FTIP is No. 19-31, which was approved by the FHWA and FTA on February 16, 2021.

Based on the proposed Project scope of work, this Project is considered exempt from conformity requirements pursuant to 40 CFR 93.126. Therefore, this Project is deemed exempt from regional conformity requirements.

Project Level Conformity

Carbon Monoxide (CO) Analysis

The Transportation Project-Level Carbon Monoxide Protocol (published by Institute of Transportation Studies, University of California, Davis, Revised December 1997) indicates that a project-level air quality analysis is not required for project exempt pursuant to 40 CFR 93.126; and it is unlikely that the proposed Project will result in adverse impacts to ambient CO.

Particulate Matter (PM) Analysis

The proposed Project is located in the South Coast Air Basin in Los Angeles County, which is in a federal nonattainment area for PM2.5 and attainment-maintenance for PM10. The proposed Project is exempt from the conformity requirements per 40 CFR 93.126, and it is a type of project that is not anticipated to involve a significant number or result in an increase in the number of diesel vehicles or increase in vehicle idling. The proposed Project is expected to have a neutral influence on PM10 and PM2.5 emissions; and thus, is not anticipated to be of air quality concern for PM10 and PM2.5. The proposed Project is unlikely to result in adverse impacts to ambient PM10 and PM2.5.

Construction (Short Term Impacts)

Construction activities will not last for more than 5 years at one general location, so construction-related emissions do not need to be included in regional and project-level conformity analysis (40 CFR 93.123(c)(5)).

For further details on construction impacts refer to Chapter 2.4 of this document.

Climate Change

Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level greenhouse gas analysis. FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and executive orders on climate change, the issue is addressed in the California Environmental Quality Act (CEQA) chapter of this document. The CEQA analysis may be used to inform the National Environmental Policy Act (NEPA) determination for the project.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, or mitigation measures are needed.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The following project features will be implemented as part of the proposed Project:

PF-AQ-1: Excessive fugitive dust emissions will be controlled by regular watering or other dust preventive measures, as specified in the South Coast Air Quality Management District (SCAQMD) Rule 403.

PF-AQ-2: Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.

PF-AQ-3: All trucks that are to haul excavated or graded material on site will comply with California Vehicle Code Section 23114, with special attention to Sections 23114(b)(F),(e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.

PF-AQ-4: The Caltrans Standard Specifications for Construction (2018), Section 14.9 must be adhered to. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.

PF-AQ-5: If naturally occurring asbestos, serpentinite, or ultramafic rock is discovered during grading operations, Section 93105, Title 17 of the California Code of Regulations requires notification to the South Coast Air Quality Control Board by the next business day and implementation of dust control measures described in Section 93105 (d)(B).

PF-AQ-6: All construction vehicles both on and off site shall be prohibited from idling in excess of 5 minutes.

The following avoidance and minimization measures must be followed:

AQ-1: Water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.

AQ-2: Soil binder will be spread on any unpaved roads used for construction purposes, and on all project construction parking areas.

AQ-3: Trucks will be washed as they leave the right-of-way as necessary to control fugitive dust emissions.

AQ-4: Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CA Code of Regulations Title 17, Section 93114.

AQ-5: Equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.

AQ-6: Environmentally sensitive areas will be established near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible.

AQ-7: Track-out reduction measures, such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.

AQ-8: All transported loads of soils and wet materials will be covered before transport, or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation.

AQ-9: Dust and mud that are deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce PM emissions.

AQ-10: To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

AQ-11: Mulch will be installed, or vegetation planted as soon as practical after grading to reduce windblown PM in the area. Be aware that certain methods of mulch placement, such as straw blowing, may themselves cause dust and visible emission issues and may require controls such as dampened straw.

2.2.7 NOISE AND VIBRATION

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The rest of this section will focus on the NEPA/Title 23 Part 772 of the Code of Federal Regulations (23 CFR 772) noise analysis; please see Chapter 3 of this document for further information on noise analysis under CEQA.

NATIONAL ENVIRONMENTAL POLICY ACT AND 23 CFR 772

For highway transportation projects with Federal Highway Administration (FHWA) involvement (and the Department, as assigned), the Federal-Aid Highway Act of 1970 and its implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). The following table lists the noise abatement criteria for use in the NEPA/23 CFR 772 analysis.

Table 2.2-9: Noise Abatement Criteria

Activity Category	NAC, Hourly A- Weighted Noise Level, Leq(h)	Description of activity category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[1]	67 (Exterior)	Residential.
C[1]	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No NAC—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No NAC—reporting only	Undeveloped lands that are not permitted.

[1] Includes undeveloped lands permitted for this activity category.

Figure 2.2-6 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

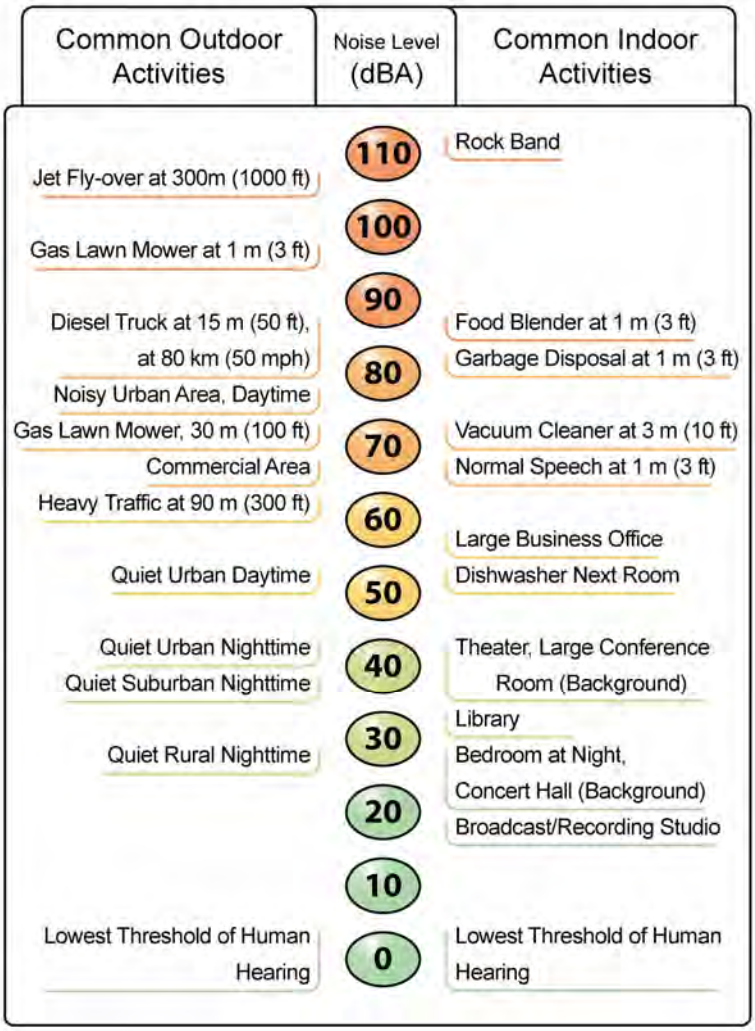


Figure 2.2-6: Noise Levels of Common Activities

According to the Department's *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, May 2011*, a noise impact occurs when the predicted future noise level with the project substantially exceeds the existing noise level (defined as a 12 dBA or more) or when the future noise level with the project approaches or exceeds the NAC. A noise level is considered to approach the NAC if it is within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

The Department's *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. Noise abatement must be predicted to reduce noise by at least 5 dB at an impacted receptor to be considered feasible from an acoustical perspective. It must also be

possible to design and construct the noise abatement measure for it to be considered feasible. Factors that affect the design and constructability of noise abatement include, but are not limited to, safety, barrier height, topography, drainage, access requirements for driveways, presence of local cross streets, underground utilities, other noise sources in the area, and maintenance of the abatement measure. The overall reasonableness of noise abatement is determined by the following three factors: 1) the noise reduction design goal of 7 dB at one or more impacted receptors; 2) the cost of noise abatement; and 3) the viewpoints of benefited receptors (including property owners and residents of the benefited receptors).

City of Long Beach Noise Ordinance

The City Noise Ordinance states under Section 8.80.202-Construction activity-Noise regulations:

The following regulations shall apply only to construction activities where a building or other related permit is required or was issued by the Building Official and shall not apply to any construction activities within the Long Beach harbor district as established pursuant to Section 201 of the City Charter:

A. Weekdays and federal holidays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of seven p.m. and seven a.m. the following day on weekdays, except for emergency work authorized by the Building Official. For purposes of this Section, a federal holiday shall be considered a weekday.

B. Saturdays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of seven p.m. on Friday and nine a.m. on Saturday and after six p.m. on Saturday, except for emergency work authorized by the Building Official.

C. Sundays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity at any time on Sunday, except for emergency work authorized by the Building Official or except for work authorized by permit issued by the Noise Control Officer.

D. Owner's/employer's responsibility. It is unlawful for the landowner, construction company owner, contractor, subcontractor or employer of persons working, laboring, building, or assisting in construction to permit construction activities in violation of provisions in this Section.

E. Sunday work permits. Any person who wants to do construction work on a Sunday must apply for a work permit from the Noise Control Officer. The Noise Control Officer may issue a Sunday work permit if there is good cause shown; and in issuing such a permit, consideration will be given to the nature of the work and its proximity to residential areas. The permit may allow work on Sundays, only between nine a.m. and six p.m., and it shall designate the specific dates when it is allowed.

F. Enforcement. Notwithstanding the provisions of Sections 8.80.370 and 8.80.380, this Section may be enforced by a Police Officer.

Section 8.80.330 – Exemption—Public Health, welfare and safety activities, which states acts are exempt from the Noise Ordinance:

The provisions of this Chapter shall not apply to construction maintenance and repair operations conducted by public agencies and/or utility companies or their contractors which are deemed necessary to serve the best interests of the public and to protect the public health, welfare and safety, including, but not limited to, street sweeping, debris and limb removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, vacuuming catchbasins, repairing of damaged poles, removal of abandoned vehicles, repairing of water hydrants and mains, gas lines, oil lines, sewers, storm drains, roads, sidewalks, etc.

City of Long Beach Noise Element

The City General Plan Noise Element establishes standards for exterior sound levels based on land use categories. The Noise Element states that the maximum acceptable outdoor noise exposure level for residential areas is 70 dBA, 75 dBA for commercial areas during daytime, and 85 dBA for industrial areas during daytime.

Table 2.2-10 summarizes the City's maximum exterior noise limits (City of Long Beach, General Plan-Noise Element, 1975).

City of Seal Beach Noise Ordinance (Municipal Code)

The City Noise Ordinance states under Section 7.15.010-Designated Noise Zones:

The noise zones of the city are as follows:

A. Noise Zone 1: Residential properties

B. Noise Zone 2: Commercial properties

C. Noise Zone 3: Industrial, manufacturing and oil properties

Section 7.15.015-Exterior Noise Standards states:

A. Unless otherwise specifically indicated, the following exterior noise standards shall apply to all property within a designated noise zone:

	Noise Standards:	
Noise Zone	*Noise Level*	*Time Period*
1	*55db(A)*	*7:00 a.m. – 10:00 p.m.*
	50db(A)	*10:00 p.m. – 7:00 a.m.*
2	*65 db(A)*	*At any time*
3	*70 db(A)*	*At any time*

Section 7.15.025- Exemptions, which states acts are exempt from the Noise Ordinance:

E. Noise associated with construction, repair, remodeling or grading of real property performed in the following periods: between 7:00 a.m. and 8:00 p.m. on weekdays; and between 8:00 a.m. and 8:00 p.m. on Saturday.

City of Seal Beach Noise Element

The City General Plan Noise Element establishes standards for exterior sound levels based on land use categories. Figure 2.2-7 summarizes the City's Noise Compatibility guidelines.

Table 2.2-10 Long Beach Maximum Exterior Noise

RECOMMENDED CRITERIA FOR MAXIMUM ACCEPTABLE NOISE LEVELS[1] IN A-WEIGHTED DECIBELS (dba)
(decibels levels for noise monitoring purposes only, for frequency and band restrictions see Section 100.02 (c) of Proposed Model Noise Ordinance, Appendix E)

Major Land Use Type	Outdoor			Indoor
	Maximum Single Hourly Peak	L_{10} (2)	L_{50} (3)	L_{dn} (4)
Residential[5] 7 a.m.-10 p.m.	70	55	45	45
Residential[5] 10 p.m.-7 a.m.	60	45	35	35
Commercial (anytime)	75	65	55	(6)
Industrial (anytime)	85	70	60	(6)

(1) Based on existing ambient level ranges in Long Beach and recommended U.S. Environmental Protection Agency ratios and standards for interference and annoyance.

(2) Noise levels exceeded ten per cent of the time.

(3) Noise levels exceeded fifty-per cent of the time.

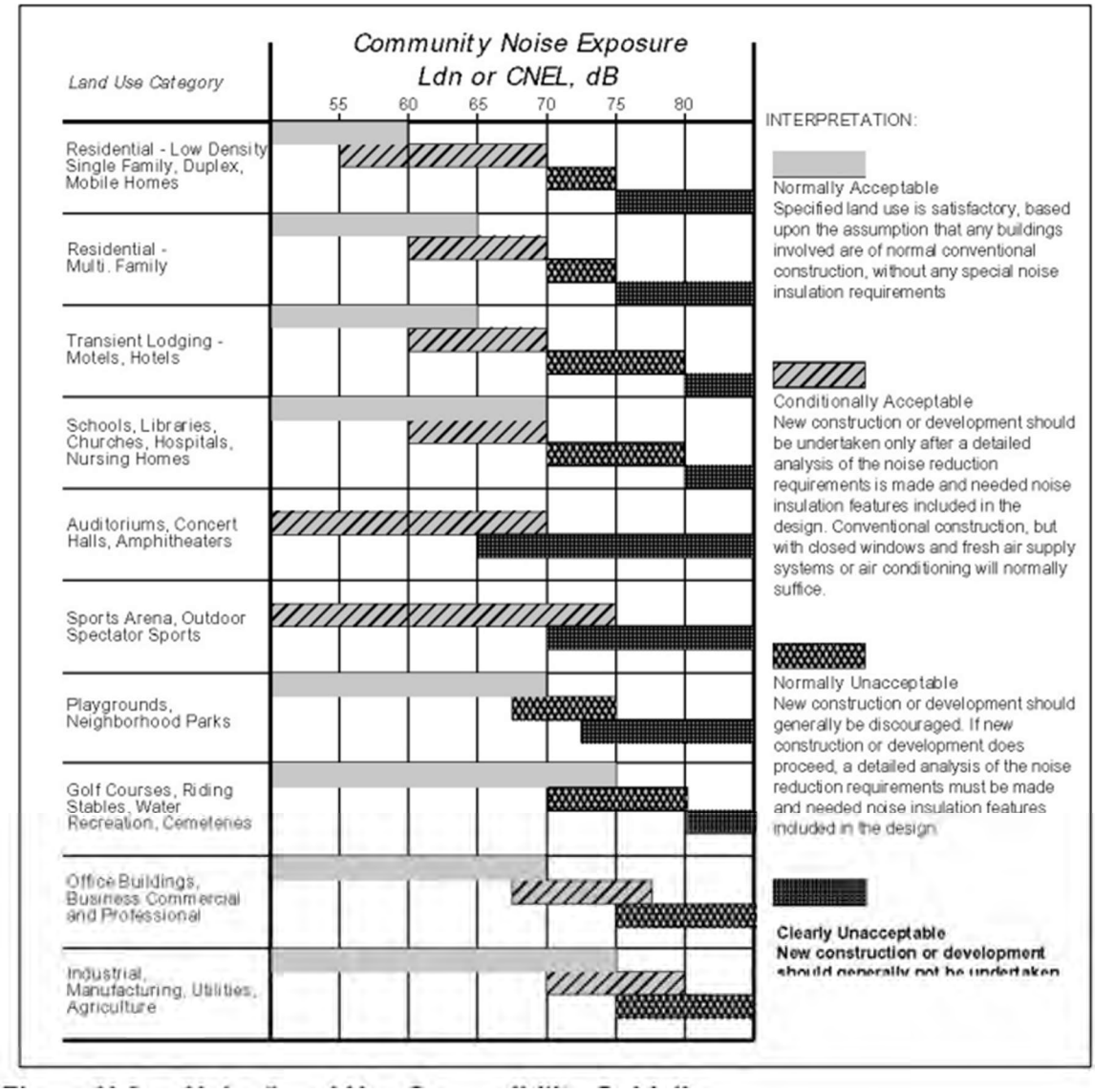
(4) Day-night average sound level. The 24-hour A-weighted equivalent sound level with a 10 decibel penalty applied to nighttime levels.

(5) Includes all residential categories and all noise sensitive land uses such as hospitals, schools, etc.

(6) Since different types of commercial and industrial activities appear to be associated with different noise levels, identification of a maximum indoor level for activity interference is unfeasible.

Source: U.S. Office of Noise Abatement and Control; Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, Arlington, Virginia; U.S. Environmental Protection Agency, March, 1974, pp. 3, 29.

Figure 2.2-7 Seal Beach Noise/Land Use Compatibility Guidelines



Affected Environment

Under 23 CFR 772.7, projects are categorized as Type I, Type II, or Type III projects. The FHWA defines a Type I project as a proposed federal or federal aid highway project for the construction of a highway in a new location, or the physical alteration of an existing highway significantly changes either the horizontal or vertical alignment, or increases the number of through-traffic lanes. The proposed Project is not classified as a Type I project based on 23 CFR 772.7 and Caltrans 2020 Traffic Analysis Noise Protocol. Because this is not a Type I project, the following discussion will be limited to the existing noise environment.

Sound and Noise

Noise is often defined as unwanted sound that is typically associated with human activity and that interferes with normal activities. Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Sound and noise is a process that consists of three components:

- Sound Source
- Sound Path
- Sound Receiver

All three components must be present for sound to exist and sound must be received by a hearing organ (ear), sensor, or object that perceives or is affected by sound or noise. In most situations, there are many different sound sources, paths, and receivers, instead of just one of each.

Sound levels are measured and expressed in decibels. The human ear does not respond uniformly to sounds at all frequencies, being less sensitive to low and high frequencies than to medium frequencies, which correspond with human speech. In response, the A-weighted noise level (or scale) has been developed. This A-weighted sound level if called the “noise level”, which is referenced in units of A-weighted decibel(s). The human ear does not typically notice changes in noise levels of less than three A-weighted decibel(s). The equivalent noise level (L_{eq}) is the average A-weighted sound level measured over a given time interval. L_{eq} can be measured over any time period, but is typically measured for 1-hour periods and is expressed as $L_{eq}(h)$.

Land Uses

The land uses in the project area consist primarily of vacant land, multi-family residential, and commercial uses (Figure 2.1-2). Noise sensitive uses in the area are located along Pacific Coast Highway northwest and southwest of the Project site, consisting of commercial buildings and multi-family residences, respectively.

Noise Measurement Sites

The City of Seal Beach General Plan, Noise Element, states that community noise measurements at ten sites throughout the City were conducted on November 20, 2002. The results at each site are listed in Table 2.2-11. The site closest to the project is Site A, West of P.C.H. at 1 St.

Table 2.2-11 Noise Measurement Results in Seal Beach

Noise Measurement Results

Site	Lmax	LEQ	Roadway	Location
A	66.9	60.1	1st St.	West of P.C.H
B	65.3	59.8	Marina Dr.	At 4th St.
C	66.9	63.2	Main St.	At Electric Ave.
D	73.4	68.2	P.C.H.	At 12th St.
E	72.6	68.5	P.C.H.	Along Surfside Ave.
F	68.7	62.5	Bolsa Ave.	At Bayside Dr.
G	69.0	65.3	Seal Beach Blvd.	At Balboa Ave.
H	69.3	65.1	Westminster Ave.	West of Seal Beach Blvd.
I	72.8	70.3	Lampson Ave. / I-405	Old Ranch Country Club
J	67.4	66.1	Almond Ave. / I-405	At Aster

At Site A selected for the noise survey, land use includes predominately residential neighborhoods. Less sensitive land uses (e.g. commercial) also exist further south. In general, traffic noise was the primary noise source near the proposed Project site. The noise measurements results indicate that sites impacted by Pacific Coast Highway experienced noise levels of greater than 65 CNEL. The noise levels measured are typical of urban environments.

Environmental Consequences

No Build Alternative

If Alternative 1 is selected, there would be no change in existing conditions and therefore no noise-related impacts.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Noise analysis concluded that neither Build Alternative would result in substantial increase in noise levels; therefore, permanent noise abatement measures are not needed.

Avoidance, Minimization, and/or Mitigation Measures

NOI-1 All equipment shall have sound-control devices that are no less effective than those provided on the original equipment. No equipment shall have an un-muffled exhaust.

NOI-2 As directed by the Caltrans Resident/Project Engineer, the contractor shall implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.

NOI-3 All work shall adhere to Caltrans Standard Specifications, Section 7-1.01I, “Sound Control Requirements,” which states that noise levels generated during construction will comply with applicable local, State, and federal regulations, and that all equipment will be fitted with adequate mufflers according to the manufacturers’ specifications.

NOI-4 Noise control shall conform to the provisions in Section 14-8.02, “Noise Control,” of the Caltrans Standard Specifications. Control and monitor noise resulting from work activities; Do not exceed 86 dBA Lmax at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

2.2.8 ENERGY

Regulatory Setting

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

The California Environmental Quality Act (CEQA) Guidelines section 15126.2(b) and Appendix F, Energy Conservation, require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

Affected Environment

Within the Project limits (PM 0.04), this segment of SR-1 at the San Gabriel River Bridge consists of two through lanes in both the north and south direction. The existing lanes are 12 feet in width and the existing shoulders are 5 feet in width. The shoulders also constitute as shared bike lanes. The sidewalk along the bridge is 5 feet in width and does not have any curb ramps at either end of the bridge. The width of the San Gabriel River Bridge (Bridge No. 53-0060) between ends is 60 feet. There are existing light poles on both sides of the bridge.

Environmental Consequences

No Build Alternative

There would be no change in existing conditions and therefore no energy-related impacts would occur.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The Proposed project is being implemented through the State Highway Operation and Protection Program (SHOPP). The selection process for SHOPP projects is specified in the Transportation Asset Management Plan (TAMP) created by Caltrans, in consultation with the California Transportation Commission (CTC), pursuant to Senate Bill 486. The TAMP assesses the health and condition of the state highway system with which Caltrans is able to determine the most effective way to apply state's limited resources. The goals and objectives established in the TAMP for SHOPP includes conserving natural resources and reducing GHG and other pollutants. As the proposed project is a part of the SHOPP, it has been identified by Caltrans, and approved by the CTC, as necessary to preserve and protect the assets of the state highway system. It will not result in a wasteful, inefficient, or unnecessary consumption of energy.

Build Alternatives 2 and 3 are in alignment with the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Associate of Governments as the Project will not increase Vehicle Miles Traveled (VMT). The purpose of the Project is to bring the San Gabriel River bridge railing and width up to current standards to improve safety. The Project is not anticipated to result in an increase in operational Greenhouse Gas Emissions (GHG) as no additional roadway capacity will be added.

The proposed Project is not a capacity increasing project and would not contribute to an increase in VMT or induce growth.

The one-time construction of the bridge and roadway features will constitute direct energy. The construction equipment and vehicles used during the Project improvements will utilize direct

energy. However, the energy needs for the project will be temporary and will only last for the duration of the project.

Proposed project construction would primarily consume diesel and gasoline through operation of heavy-duty construction equipment, material deliveries, and debris hauling. Energy use associated with proposed project construction is estimated to result in the short-term consumption of diesel and gasoline. This represents a small demand on local and regional fuel supplies that would be easily accommodated, and this demand would cease once construction is complete. Moreover, construction-related energy consumption would be temporary and not a permanent new source of energy demand, and demand for fuel would have no noticeable effect on peak or baseline demands for energy. While construction would result in a short-term increase in energy use, construction design features would help conserve energy. For example, recycled materials will be used where feasible. Recycled products typically have lower manufacturing and transport energy costs since they do not utilize raw materials, which must be mined and transported to a processing facility.

As part of the proposed scope of work, lighting fixtures at both ends of the bridge will be replaced. The new lighting fixtures will be as energy efficient as feasible.

The Project will include pavement resurfacing along the length of the bridge. The upgraded pavement will result in an increase in indirect energy savings, as less maintenance of the roadway will be required in the future. Additionally, smoother pavement surfaces will improve vehicle operations, reduce emissions, and reduce energy consumption. The proposed Project will also implement multimodal transportation features such as wider shared shoulder/bike lanes and wider pedestrian sidewalks, therefore, potentially offsetting energy usage by automobile users.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, and/or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

E-1: The most energy efficient lighting fixtures should be utilized to replace the existing light fixtures.

2.3 Biological Environment

2.3.1 NATURAL COMMUNITIES

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species section [Section 2.3.5]. Wetlands and other waters are also discussed below [Section 2.3.2].

As permitted by the California Coastal Act, the City of Long Beach has enacted its own local coastal program (LCP). The LCP provides blueprints for the City's short-and-long term use and protection of coastal resources, including water and land habitats.

The City of Long Beach's Southeast Area Specific Plan (SEASP), which outlines the LCP guidelines for the specific area the Project site is located in, defines an Environmentally Sensitive Habitat Area (ESHA) as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in the ecosystem and which could be easily disturbed or degraded by human activities and developments.

Affected Environment

The information in this section is summarized from the *Natural Environment Study* (December 2021 and revised April 2022).

The project limits consist of State Route 1 (SR-1) at PM 0.04 from the begin and end points of the San Gabriel River Bridge structure (Bridge No. 53-0060) over the San Gabriel River Channel. The proposed Project work is at a spot location (PM 0.04). The Biological Study Area (BSA) encompasses the project limits and includes a buffer of 100 feet in each direction surrounding the Project footprint. The BSA was intended to capture all areas in which project activities would occur as well as those areas containing biological resources that are subject to potential indirect impacts.

The Project study area is urban and involves a highly trafficked area. Areas that would be impacted by proposed work activities include developed, barren, and those which are dominated by ruderal/weedy plant species. Beyond the proposed Project area, biological conditions consist of undeveloped open space at the Los Cerritos Wetlands, urban land uses with commercial, residential, and industrial areas, as well as paved roadway surfaces with landscaped vegetation. Areas beneath the San Gabriel River Bridge are unvegetated and barren, consisting of a pedestrian, bicycle path and constant flowing water. Areas within the banks are lined with rip-rap and appear to have flowing water year-round.

No essential fish habitat or designated critical habitat is located within the project limits or would otherwise be affected. There was one sensitive habitat type identified within the Los Alamitos quadrangles: Southern Coastal Bluff Scrub (CNDDB, 2018). However, it was determined that no habitats or natural communities of special concern, including Southern Coastal Bluff Scrub, are present at the bridge location.

Figure 2.3-1 Biological Study Area

Map created by Rocky Rojas, Division of Environmental Planning, April 14, 2022

Environmental Consequences

No Build Alternative

The No Build Alternative would not result in any change in existing conditions. Therefore, there would be no impacts on natural communities of special concern.

Build Alternatives 2 and 3

The proposed Project is not expected to affect or impact any critical habitats or natural communities of special concern since none are located within the BSA. The Project would not impact any essential fish habitat or designated critical habitat since none is located within the vicinity of the bridge location.

The Project would not introduce any structures that could act as barriers to wildlife, or facilitate any increase in traffic or vehicle speeds. Therefore, the Project is not expected to negatively impact existing wildlife corridors or have any effect on habitat connectivity.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, or mitigation measures would be required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Project Feature:

PF-BIO-1:

- To avoid impacts to nesting birds, any native or exotic vegetation removal or tree-trimming activities will occur outside the nesting season (February 1 through September 1). In the event that vegetation clearing is necessary during the nesting season, a preconstruction survey will be conducted by a qualified biologist within 3 days of commencement of vegetation removal or the beginning of construction activities to identify the locations of nests. Should nesting birds be found, an exclusionary buffer will be established by the biologist.

Avoidance and minimization measures:

NC-1 All pollution and litter laws and regulations will be followed by all personnel on site.

NC-2 The Division of Environmental Planning will be provided the Project Specifications and Expenditures Review Package for review and comments.

NC-3 If the project scope should change for any reason, the Division of Environmental Planning will be notified to determine whether current environmental documentation is adequate.

2.3.2 WETLANDS AND OTHER WATERS

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. The lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high water mark (OHWM), in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 Code of Federal Regulations [CFR] 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a "least environmentally damaging practicable alternative" (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, EO 11990 states that a federal agency, such as FHWA and/or the Department, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction and (2) the proposed project includes all practicable measures to minimize harm. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal

Commission (or Bay Conservation and Development Commission or the Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see the Water Quality section for more details.

Affected Environment

The assessment of potential impacts to Wetlands and other waters is described in the Natural Environment Study (December 2021) and the Jurisdictional Delineation Report (May 2022) that were prepared for this Project by Caltrans.

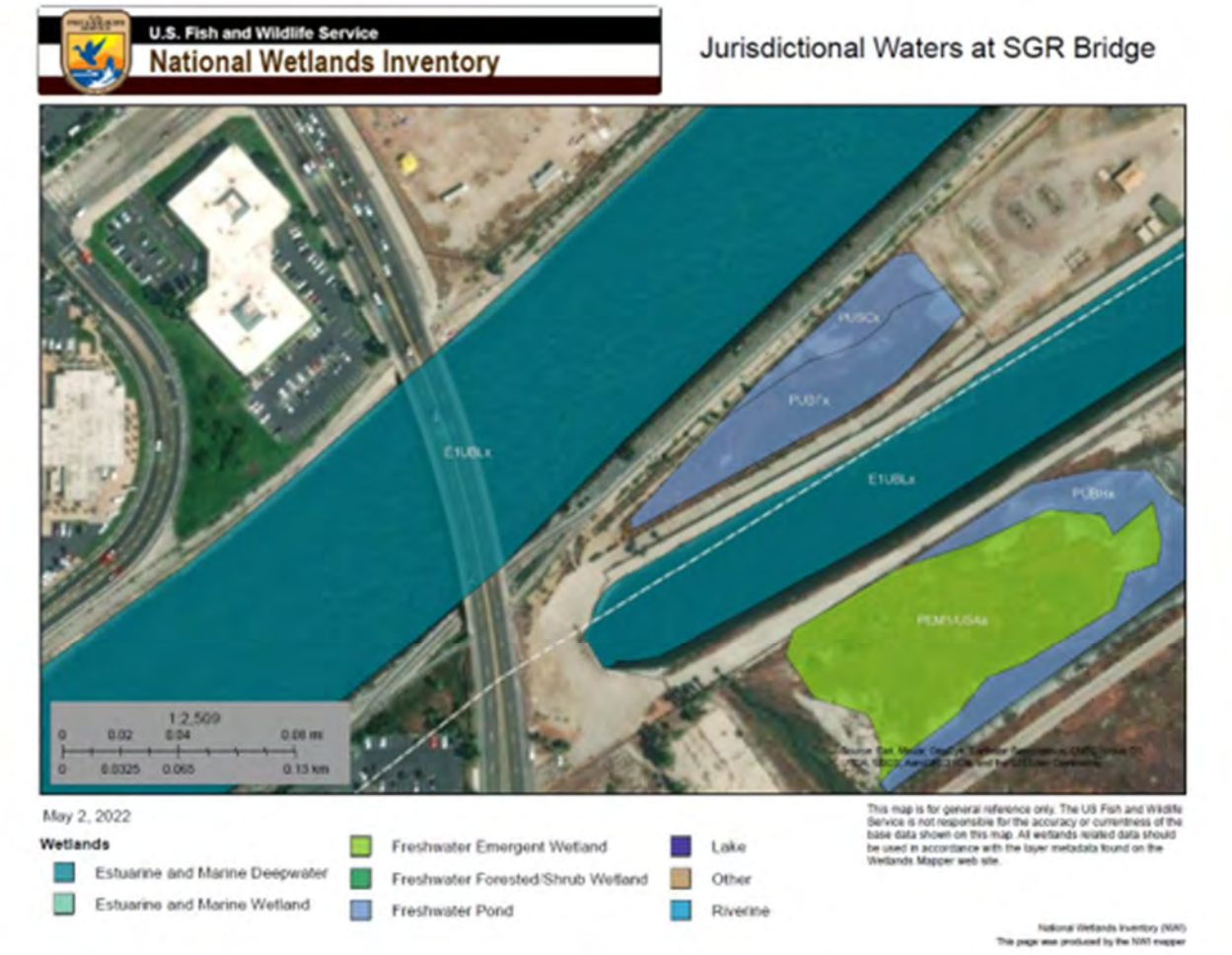
The BSA was described earlier in this document in Section 2.3.1 Natural Communities. Elevations in the BSA range from approximately 0 to 9 feet (ft) above mean sea level. The topography is flat along SR-1. The vast majority of the BSA consists of paved roadbed, associated paved shoulders, and unpaved disturbed areas surrounding residential areas, and is subject to live traffic. Vegetation within the BSA consists of ornamental landscaping and has little to no natural vegetation communities present.

Drainages regulated by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife are located within the BSA within the San Gabriel River Watershed (including Los Cerritos Wetlands) and drain into the San Gabriel River within the project area.

The San Gabriel River is considered to be a federal Riverine (Estuarine and Marine Deepwater, Freshwater Emergent Wetland, and Riverine). The unnamed freshwater pond and Los Cerritos Wetlands adjacent to the San Gabriel River is a federal wetland (Waters of the U.S.). Although these wetlands are adjacent to the project area they, they are not located within the project footprint and therefore will not be affected by construction. No construction will take place within the Los Cerritos Wetlands. Construction also will not take place directly adjacent to the freshwater pond near just south of the San Gabriel River.

Jurisdictional waters are shown in Figure 2.3-2.

Figure 2.3-2 Jurisdictional Waters at San Gabriel River Bridge



The fieldwork for this evaluation was conducted by Caltrans biologist Rico Ramirez on April 26, 2022. Where access was available, the study area was surveyed on foot for both Federal and State jurisdictional areas. Where access was not available (e.g. inaccessibly steep slopes), areas were analyzed from property boundaries. During the survey, the biologist looked for indicators of potential Jurisdictional Water features by looking for wetland indicators, specifically the presence of hydrophytic vegetation, hydric soils, and wetland hydrology, according to routine delineation procedure outlined in the Wetlands Delineation Manual (USACE 1987) and the guidance in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual. There is no wetland in the San Gabriel River, therefore a formal Jurisdictional Delineation is not required for this project.

United States Army Corps of Engineers

There are no drainages within the BSA where potential Corps jurisdictional wetlands occur (where all three wetland criteria are met as outlined in the Regional Supplement). All drainages within the BSA are artificially created drainages. Due to the lack of presence of hydrophytic

vegetation and wetland hydrology, (no soil pits were dug due to the other parameters not being met for wetlands), it has been determined that there are no potential wetland waters of the U.S. within the BSA; however, because there is a connection between this drainage and a tributary system, the Los Angeles River, linking it to a Traditional Navigable Water (TNW) (Pacific Ocean), the Corps may assert jurisdiction over the drainage.

Drainages Systems 3, 8, and 9 all drain directly into the Los Angeles River, which meets the Corps criteria for a direct or indirect connection to interstate commerce. At least a part of the Los Angeles River is considered a TNW due to tidal influences at its mouth, approximately 2 mi from the BSA. Because these drainages create a nexus, it is expected that the Corps will assert jurisdiction over Drainage Systems 3, 8, and 9. See Appendix A for the locations of these drainages.

Drainage Systems 3, 8, and 9 are considered Potential non-wetland Waters of the U.S. since they are considered a nexus to navigable waters, yet do not meet all three parameters of a wetland (hydrology, vegetation, and soils).

The drainages within the BSA are composed of a mixture of natural earthen bottoms and concrete-lined channels, which are usually considered potential non-jurisdictional areas. All these drainages have been altered in some form or are wholly humanmade and are degraded by invasive nonnative ruderal and ornamental species. According to the Corps guidance, drainage features may be excluded from CWA jurisdiction, and the Corps will not assert jurisdiction, if they are wholly in and drain only uplands (nontidal drainage and irrigation ditches that are excavated on dry land), drain adjacent upland areas, and do not carry relatively permanent water, or they are low-volume swales; however, this is not the case for Drainages 3, 8, and 9, since they are artificially created drainages that flow to a pumphouse (only for Drainage 3), and then to the Los Angeles River, which discharges to the Pacific Ocean (a TNW). The drainages create a nexus for federal jurisdiction, so they do not qualify as Potential Non-Jurisdictional Areas.

California Department of Fish and Wildlife

All the areas satisfying the Corps jurisdictional criteria for waters of the U.S. and adjacent wetlands are also subject to CDFW jurisdiction pursuant to Section 1602 of the California Fish and Wildlife Code. Pursuant to Section 1602 of the California Fish and Wildlife Code, CDFW has direct jurisdiction over any activities that will divert, obstruct, or change a streambed; use material from the streambeds; or result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a stream. In addition, streambed banks and adjacent riparian areas extending beyond the limits of the Corps jurisdiction are considered subject to CDFW jurisdiction. Although none of the parameters of a wetland are met within the BSA, there are connecting waters of the U.S. or wetlands, which creates a federal nexus. CDFW usually claims jurisdiction for all areas that fall under USACE jurisdiction. The area which is considered Waters of the State will need to be further negotiated with CDFW.

Regional Water Quality Control Board

Because there is no public guidance on determining RWQCB jurisdictional areas, jurisdiction was determined based on the federal definition of wetlands (three-parameter) and other waters of the U.S. (OHWM) as recommended by the *September 2004 Workplan* (SWRCB 2004). The total area of potential RWQCB jurisdiction is the same as USACE jurisdiction.

Environmental Consequences

No Build Alternative
If the proposed Project is not built, there will be no impacts to wetlands or other waters.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)
It is expected that only 0.0108 acres of water of jurisdictional features will be impacted. There should be no permanent impacts beyond the 0.0108 acres of water that are considered to be a federal nexus. Table 2.3-1 shows the potential Corps jurisdictional and non-jurisdictional areas within the BSA. Type of impact (temporary or permanent) has yet to be determined with the appropriate agencies.

Table 2.3-1 Potential Corps Jurisdictional and Non-Jurisdictional Areas

Potential Corps Areas	**Area (ac)**
Jurisdictional Wetlands	0
Jurisdictional Nonwetlands	0.0108
Nonjurisdictional Areas	1.4392
Total Area	**1.45**

ac = acres
Corps = United States Army Corps of Engineers

The portion of jurisdictional features within or adjacent to the proposed Project footprint is assumed to be subject to Sections 404 and 401 of the federal Clean Water Act (CWA) and the Porter-Cologne Water Quality Act (Porter-Cologne). A CWA 404 Nationwide Permit and CWA 401 Water Quality Certification would need to be obtained. There are potential Waters of the State that will be impacted within the Project footprint, therefore jurisdictional features are subject to CDFW jurisdiction pursuant to Section 1602 of the California Fish and Wildlife Code and a 1602 Streambed Alteration Agreement will be required. The total area of potential RWCQB jurisdiction is based on the total potential Corps jurisdiction. The area of RWQCB jurisdiction is 0.0108 acres. Per California Coastal Commission requirements, 3:1 mitigation will be required for impacts to 0.0108 acres of Coastal waters. The mitigation will be developed during the Coastal permitting process

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative
No avoidance, minimization, and/or mitigation measures are required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)
Per California Coastal Commission requirements, 3:1 mitigation will be required for impacts to 0.0108 acres of Coastal waters. The mitigation will be developed during the Coastal permitting process.

2.3.3 PLANT SPECIES

Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species section 2.3.5 in this document for detailed information about these species.

This section of the document discusses all other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000-21177.

Affected Environment

The information in this section is summarized from the *Natural Environment Study* (December 2021).

A list of special-status plant species that have the potential to occur within the vicinity of the BSA was obtained through an online search of the following databases:

- California Native Plant Society (CNPS)
- California Natural Diversity Database (CNDBB) species list for the Los Alamitos USGS topographic quadrangles
- United States Fish and Wildlife Service (USFWS) IPaC website (Information, Planning, and Conservation)

This review identified 13 special-status plants species of concern with the potential to occur within the vicinity of the project; they are shown in Table 2.3-2. Of these 13, only one special-status plant species occurs within the project footprint: Southern tarplant.

Table 2.3-2 Plant Species of Concern

Common Name (*Scientific Name*)	Status	General Habitat Description	Habitat: Potential/Absent	Conclusion and Rationale
Horn's milk-vetch (*Astragalus hornii var. hornii*)	CNPS 1B.1	Alkali sinks and wetland-riparian	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.
Parish's brittlescale (*Atriplex parishii*)	CNPS 1B.1	Chenopod scrub, playas, vernal pools	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.
Lucky morning-glory (*Calystegia felix*)	CNPS 1B.1	Meadows and seeps, Riparian scrub	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.

Common Name (*Scientific Name*)	**Status**	**General Habitat Description**	**Habitat: Potential/Absent**	**Conclusion and Rationale**
southern tarplant (*Centromadia parryi ssp. australis*)	CNPS 1B.1	Marshes and swamps (margins), valley and foothill grassland (vernally mesic), vernal pools	Present	General habitat for this species is present within the vicinity of the project. As the general habitat within the project area is patchy and marginal, the species is not expected within the project area.
salt marsh bird's-beak (*Chloropyron maritimum ssp. maritimum*)	FE, SE	Coastal dunes, marshes and swamps (coastal salt)	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.
Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*)	CNPS 1B.1	Marshes and swamps (coastal salt), playas, vernal pools	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.

Common Name (*Scientific Name*)	**Status**	**General Habitat Description**	**Habitat: Potential/Absent**	**Conclusion and Rationale**
mud nama (*Nama stenocarpa*)	CNPS 2B.2	Marshes and swamps (lake margins, riverbanks)	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.
coast woolly-heads (*Nemacaulis denudata var. denudata*)	CNPS 1B.2	Coastal dunes	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.
California Orcutt grass (*Orcuttia californica*)	FE, SE	Vernal pools	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.

Common Name (*Scientific Name*)	**Status**	**General Habitat Description**	**Habitat: Potential/Absent**	**Conclusion and Rationale**
Brand's star phacelia (*Phacelia stellaris*)	CNPS 1B.1	Coastal dunes, coastal scrub	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.
salt spring checkerbloom (*Sidalcea neomexicana*)	CNPS 2B.2	Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.
estuary seablite (*Suaeda esteroa*)	CNPS 1B.2	Marshes and swamps (coastal salt)	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.

Common Name (*Scientific Name*)	Status	General Habitat Description	Habitat: Potential/Absent	Conclusion and Rationale
San Bernardino aster (*Symphyotrichum defoliatum*)	CNPS 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic)	Absent	The habitat associated with this species does not occur within the project area. Therefore, the species is not expected to occur within the project limits.

FE- Federal Endangered
SE- State Endangered
CNPS- California Native Plant Society

A general habitat assessment for the site was conducted on February 3, 2021 to identify the current habitat conditions. An underwater SCUBA survey within the San Gabriel River channel was conducted on August 17, 2021 and August 18, 2021.

One special-status plant species listed in Table 2.3-2 occurs within the BSA of the Project site. Southern tarplant (*Centromadia parryi ssp. australis*) was observed during the site visit on August 17, 2021. The field survey identified that this plant is growing in a small population near the northwest corner of the bridge. The plant is located along the Los Angeles County Flood Control access road is mixed with non-native invasive plant species.

Southern tarplant is an annual herb that is endemic to California and parts of Baja California. This plant species is found in wetland and non-wetland areas with an elevation range less than 200 meters. Southern tarplant has a bloom period from May through November and is found in Santa Barbara, Ventura, Los Angeles, Orange, Riverside, and San Diego Counties. The other plant species identified within the BSA were ornamentally planted or invasive noxious weeds.

According to the Coastal Act and as outlined in the City of Long Beach Southeast Area Specific Plan, Environmentally Sensitive Habitat Areas (ESHA) are “any area in which plant or animal life or their habitats are either rate or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and development” (Coastal Act Section 30107.5). Identification of ESHA is made on a case-by-case basis, based upon site-specific evidence, and in consultation with a qualified professional.

The City of Long Beach SEASP identifies areas known to have the potential for wetlands, ESHA, marine resources, or sensitive species and include the following:

- Open Water
- Sim's Pond
- Loynes Property
- Open Space Areas West of Studebaker Road and North of the Synergy Oil Fields (Studebaker Straddle Site)
- Synergy Oil Fields
- Bahia Marina View Parcel
- Jack Dunster Marine Reserve
- LCWA/Synergy Site
- Bryant Property (Western and Eastern)
- City of Long Beach Property Site (Marketplace Marsh)
- Pumpkin Patch Site

Of these identified areas, the Open Water and Pumpkin Patch Site are the only ones with relative proximity to the Project Site. However, it was determined that no habitats or species of special concern, including Southern Coastal Bluff Scrub, are present at the bridge location. There is no vegetation under the San Gabriel River bridge. At the Pumpkin Patch Site, small isolated patches of pickleweed and Southern tarplant, that were not determined to be a part of wetland habitat or ESHA, have been mapped at the site.

Environmental Consequences

No Build Alternative

There would be no change from the existing condition. Therefore, no impacts to sensitive plant species would occur.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The proposed Project improvements are not currently expected to affect or impact the Southern tarplant population within the BSA. As shown in Table 2.3-1, most plants identified within the BSA are non-native species, and the only native plants consisted or common species. Avoidance and minimization efforts to protect Southern tarplant (*C. parryi ssp. australis*)

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, or mitigation measures would be required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Project Feature:

PF-BIO-2: The construction contractor shall inspect and clean construction equipment at the beginning of each day and prior to transporting equipment from one Project location to another. Any plants removed, or soil disturbed during the course of construction should be contained and properly disposed of offsite. All mulch,

topsoil, seed mixes, or other plantings used during landscaping activities and erosion-control Best Management Practices (BMPs) implemented will be free of invasive plant species seeds or propagules listed on the California Invasive Plant Council (Cal-IPC) Inventory. City tree planting and removal requirements will be adhered to.

Avoidance and minimization measures:

PS-1 Biological monitor is needed when construction is taking place at Post Mile 0.04.

PS-2 Environmentally Sensitive Area (ESA) fencing will be set up to create a buffer for the rare plant, prior to any construction, clearing or grubbing.

PS-3 If any sensitive plant species are observed within the project footprint and are unavoidable, they should be relocated/transported by a qualified botanist to the similar habitat.

PS-4 If any species of concern are observed during any phase or construction, the Resident Engineer (RE) will need to contact the Environmental Planner (District Biologist), Rico Ramirez, at 213-266-3783 and all work shall be postponed immediately.

PS-5 Caltrans will perform at least two species specific surveys at the peak and near the end of the flowering season for Southern tarplant within the project footprint. Caltrans will follow Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities by CDFW. A survey report will be written and supplied to CDFW.

PS-6 Caltrans will use a standard specification that stockpiles the top layer of the soil in the temporary impact areas. The stockpiled soil will contain the existing seed bank.

2.3.4 ANIMAL SPECIES

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the Threatened and Endangered Species Section [Section 2.3.5] below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act
- Executive Order 13112- Invasive Species

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code
- Sections 2080 and 2081 of the California Fish and Game Code

Affected Environment

The information in this section is summarized from the *Natural Environment Study* (December 2021 and revised April 2022).

Special-status animal species include CDFW Fully Protected species and Species of Special Concern, as well as those formally listed as Threatened or Endangered at either the state or federal level. The CDFW's CNDDB and USFWS' IPaC were reviewed to identify those species that are known to occur in the area of the project. Based on this information, a total of 33 special-status animal species were identified that have the potential to occur or are known to occur in the BSA. The species identified include:

- Tricolored blackbird (*Agelaius tricolor*)
- Southern California legless lizard (*Anniella stebbinsi*)
- Burrowing owl (*Athene cunicularia*)
- Crotch bumble bee (*Bombus crotchii*)
- Ferruginous hawk (*Buteo regalis*)
- Swainson's hawk (*Buteo swainsoni*)

- Green turtle (*Chelonia mydas*)
- Western snowy plover (*Charadrius alexandrines nivosus*)
- Western tidal-flat tiger beetle (*Cicindela gabbii*)
- Sandy beach tiger beetle (*Cicindela hirticollis gravida*)
- Western beach tiger beetle (*Cicindela latesignata latesignata)*
- Yellow-billed cuckoo (*Coccyzus americanus*)
- Monarch-California overwintering population (*Danaus plexippus pop. 1*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Western mastiff bat (*Eumops perotis californicus*)
- Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*)
- Silver-haired bat (*Laisonycteris noctivagans*)
- South coast marsh vole (*Microtus californicus stephensi*)
- San Diego desert woodrat (*Neotoma lepida intermedia*)
- Pcoket free-tailed bat (*Nyctinomops femorosaccus*)
- Big free-tailed bat (*Nyctinomops macrotis*)
- Southern steelhead trout (*Oncorhynchus mykiss*)
- California brown pelican (*Pelecanus occidentalis californicus*)
- Pacific pocket mouse (*Perognathus longimembris pacificus*)
- Coast horned lizard (*Pharynosoma blainvilii*)
- Coastal California gnatcatcher (*Polioptila californica californica*)
- Bank swallow (*Riparia riparia*)
- Mohave tui chub (*Siphateles bicolor mohavensis*)
- California least tern (*Sterna antillarum browni*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)
- American badger (*Taxidea taxus*)
- Mimic tryonia (*Tryonia imitator*)
- Least Bell's vireo (*Vireo bellii pusillus*)

Two special status animal species were determined to have the potential to occur within the BSA based on field surveys and habitat requirements: Green sea turtles (*Chelonia mydas*) and California least tern (*Sterna antillarum*).

Suitable foraging habitat is present for both species listed above.

None of the special-status animal species listed above were observed during field surveys. No bats or signs of bats were observed at the San Gabriel River Bridge, but the use of suitable roosting structures can vary from between seasons and years.

Numerous nesting birds are protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Species protected under the Migratory Bird Treaty Act were observed during field surveys and it is possible that they could be present within the BSA.

Environmental Consequences

No Build Alternative

There would be no change from the existing condition. Therefore, no impacts to sensitive animal species would occur.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The proposed Project is currently not expected to affect or impact any special-status animal species due to appropriate seasonal construction work windows and presence of a biological monitor during construction. In addition, no special-status animal species were found within or adjacent to the Project site during focused surveys. The Project would not impact any Essential Fish Habitat or designated critical habitat since none is located beneath the bridge or within the BSA.

Although, no special-status animal species were observed within the BSA during the field surveys, several species of birds, which are protected under the MBTA, were not nesting within the BSA. Impacts on nesting birds and avoidance and minimization measures are discussed in Section 4.5.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, or mitigation measure would be required.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

AS-1 The District Biologist will survey Bridge 53-0060 (San Gabriel River Bridge) prior to commencement of construction, to determine if green sea turtles, and/or California least terns are present.

AS-2 The District Biologist will monitor Bridge 53-0060 (Sab Gabriel River Bridge) for green sea turtles and California least terns during construction to prevent unanticipated impacts to these species. If any California least tern nests are observed within the project area, immediately cease work and notify CDFW.

AS-3 The District Biologist will conduct a nighttime emergence using acoustic recognition technology to survey Bridge 53-0060 (San Gabriel River Bridge) in the recognized bat maternity season (March 1 through October 31) prior to commencement of construction to determine if roosting bats are present. The District Biologist will also conduct a preconstruction survey at Bridge 53-0060 (San Gabriel River Bridge) no more than two weeks prior to commencement of construction to determine the presence or absence of bats. If bats are discovered at the site, no construction activities shall begin until approved bat exclusionary devices equipped with exit-only materials and roosting preventive measures are put in place on all features with potential for roosting bats that would be impacted by the proposed project activities in order to prevent bat occupation. Bat exclusionary devices shall be installed under the supervision of a CDFW-approved biologist. If bats were observed, the District Biologist will conduct daily surveys during construction to determine the presence or absence of regulated bat species. If bat maternity roosting is confirmed, construction activities shall avoid the recognized bat maternity season (March 1 through October 31) to prevent potential mortality of flightless young bats.

AS-4 The Project Biologist must be invited to the pre-construction meeting, with one week prior notice.

AS-5 Construction activity, including vegetation removal, shall be scheduled to occur outside of nesting season (nesting season is February 1st to September 1st) to avoid the bird nesting season. If that is not feasible, the Caltrans Biologist shall be notified 2 weeks in advance so that preconstruction nesting bird surveys can be conducted. If nesting birds are observed, construction activity in the immediate area shall not occur until it is determined that the young birds have left the nest. A buffer zone shall be established and maintained during all phases of construction (150 feet for songbirds and 500 feet for raptors) to ensure that nesting birds are not adversely affected.

AS-6 Caltrans will develop an acoustic monitoring plan that will outline the methods for avoiding adverse impacts to green sea turtles. The Noise unit will develop a sound monitoring plan and keep attenuation at ambient.

AS-7 Caltrans will conduct bat acoustic surveys during the next bat maternity season to evaluate the presence or absence of bats at the San Gabriel River bridge and surrounding areas.

AS-8 If California least terns are observed within the project vicinity, construction activities will immediately cease and CDFW and USFWS will be notified.

AS-9 Caltrans will evaluate the project location as potential fish passage constraint during the next Plans, Specifications and Estimates (PS&E) phase of the project.

AS-10 Based on results of fish study and if steelhead is found within the channel, then Caltrans will apply and consult with CDFW for an Incidental Take Permit (ITP). Caltrans will work during the appropriate season (November 1 through April 30) only if steelhead are found within the project limits.

2.3.5 THREATENED AND ENDANGERED SPECIES

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA) (and the Department, as assigned), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take Statement or a Letter of Concurrence. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

Affected Environment

The information in this section is summarized from the *Natural Environment Study* (December 2021 and revised April 2022).

The findings summarized in this section were based on extensive research and field surveys for special-status species in the biological study area and its vicinity. The CNDDB (Los Alamitos quadrangles) and the USFWS IPaC website were reviewed to identify the threatened/endangered species and critical habitat that have a potential to occur in the vicinity of the BSA.

An official list of threatened and endangered species potentially occurring in the project area was provided by the USFWS on May 19, 2021, and was updated on June 7, 2022. A similar list was provided by the National Marine Fisheries Service (NMFS) on November 11, 2021.

The reference material cited above indicated a total of 46 federal and/or State endangered, threatened, or candidate species have the potential to occur in the BSA. Based on the field surveys conducted in 2021, it was determined that suitable habitat is only present for three of

these species: green sea turtles, California least tern, and southern tarplant. Therefore, implementation of the proposed Project would have no impact on the 43 species for which suitable habitat is not present. This information is summarized in Table 2.3-3.

Field surveys were conducted on February 3, 2021, June 10, 2021, August 17, 2021, and August 18, 2021. No habitats or natural communities of concern were identified within the BSA at the bridge location during field surveys. One special-status plant species, southern tarplant (C. parryi ssp. australis), occurs within the BSA based on field surveys. No special-status animal species were observed at the Project site during field surveys.

Under Section 7 of FESA, Caltrans, under its delegated authority from the FHWA, is required to consult with the USFWS and/or the NOAA Fisheries Service (also known as NMFS) to ensure that Caltrans is not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. A brief summary of the consultation process conducted for this project follows.

Caltrans Coordination with CDFW was initiated on October 20, 2021 via phone and email to Erika Cleugh regarding construction activities that would occur within the San Gabriel River.

Coordination with USFWS was initiated November 2, 2021 via email with Sally Brown to discuss early input from USFWS. USFWS staff confirmed via email on November 15, 2021 that they do not have concerns about the project having impacts on any federally listed species.

Coordination with NMFS was initiated on September 1, 2021 via email with Jessica Adams to discuss informal consultation. As there is no Essential Fish Habitat within the BSA at the bridge site. The species under the jurisdiction of NMFS at this location is green sea turtles (Chelonia mydas).

Table 2.3-3 Sensitive Species Potentially Occurring or Known to Occur in the Project Area

Common Name (*Scientific Name*)	Status	General Habitat Description	Habitat: Potential/Absent	Conclusion and Rationale
Plants				
southern tarplant (*Centromadia parryi ssp. australis*)	CNPS 1B.1	Marshes and swamps (margins), valley and foothill grassland (vernally mesic), vernal pools	Present	General habitat for this species is present within the vicinity of the project. As the general habitat within the project area is patchy and marginal, the species is not expected within the project area.
Wildlife				
Green turtle (*Chelonia mydas*)	FT	Marine bay	Habitat Present	General habitat for this species is present within the vicinity of the project. As the general habitat within the project area is patchy and marginal, the species is not expected within the project area.
California least tern (*Sterna antillarum browni*)	FE, SE, SP	Tidal flats, sea coasts, and bays. Nests along the coast from San Francisco Bay south to northern Baja California. Nests on barren to sparsely vegetated site near water, usually on sandy or gravelly substrate.	Habitat Present	General habitat for this species is present within the vicinity of the project. As the general habitat within the project area is patchy and marginal, the species is not expected within the project area.

Status: Federal Endangered (FE); Federal Threatened (FT); Delisted (D); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Species of Special Concern (SSC)

Status (California Rare Plant Rank): 1A-Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere; 1B-Plants Rare, Threatened, or Endangered in California and Elsewhere; 2A-Plants Presumed Extirpated in California, But Common Elsewhere; 2B-Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere; 3-Plants about Which More Information is needed - A Review List; 4-Plants of Limited Distribution. Threat Ranks: 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat); 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat); 0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Environmental Consequences

No Build Alternative

The No Build Alternative would not result in any change in existing conditions. Therefore, there would be no impacts to threatened or endangered species.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

The proposed Project would have no effect on designated critical habitat. This project may affect not likely to adversely affect the seasonal foraging of green sea turtles in the San Gabriel River Channel. Therefore, the Project would need to comply with the Federal Endangered Species Act and informal consultation with NMFS is necessary. There is no Essential Fish Habitat within the BSA or adjacent areas. Therefore, there will be no effects on any essential fish habitat. A no effects concurrence letter from NMFS is being developed to obtain clearance for the Project activities.

The proposed Project would have no effect on any state-listed endangered or threatened species, including California least tern and green sea turtles. Therefore, the project would comply with the California Endangered Species Act. Formal consultation and agreements with CDFW will be established through the Section 1602 Streambed Alteration Agreement during the PS&E phase of the project.

Since the Project is not located within an area managed or protected by NOAA Fisheries, there would be no effect on any species listed or proposed for listing by that agency.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, and/or mitigation measures are needed.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Although suitable habitat is present for sensitive-species, these species are not expected to be found within the Project footprint. The following precaution(s) shall be implemented to avoid impacts to listed species:

TE-1 Biological monitor is needed when construction is taking place in the stream channel. The District Biologist will monitor each morning prior to the start of construction for green sea turtles and California least tern during construction to prevent unanticipated impacts to these species. If green sea turtles are present, construction should pause until they leave on their own volition.

TE-2 Environmentally Sensitive Area (ESA) fencing will be set up to create a buffer for the rare plant, prior to any construction, clearing, or grubbing.

TE-3 The District Biologist will survey Bridge 53-0060 (San Gabriel River Bridge) for green sea turtles and California least terns prior to commencement of construction.

TE-4 If listed and/or protected species are discovered during construction, all work shall cease, and the Caltrans Biologist shall be notified immediately. No work shall continue until coordination with NMFS, USFWS and CDFW has been conducted and a protection plan implemented.

2.3.6 INVASIVE SPECIES

Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State’s invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

Affected Environment

The information in this section is summarized from the *Natural Environment Study* (December 2021 and revised April 2022).

The Project site is located in an urbanized area that contains a mix of developed commercial and residential land uses, as well as open, undeveloped parcels. Due to the proposed Project area being a highly trafficked area, areas that would be affected by work activities are developed, barren, or dominated by ruderal/weedy plant species. Beyond the proposed Project area, biological conditions consist of undeveloped open space at the Los Cerritos Wetlands, urban land uses with commercial, residential, and industrial areas, as well as paved roadway surfaces with landscaped vegetation.

Areas beneath the San Gabriel River Bridge are unvegetated/barren consisting of a pedestrian, bicycle path and constant flowing water. Areas within the banks are lined with rip-rap and appear to have flowing water year-round. Vegetation within the San Gabriel River Bridge project area is predominately composed of non-native, invasive species, and a small amount of native species. Several non-native rock pigeon (*Columba livia*) nests were observed on the underside of the San Gabriel River Bridge.

Environmental Consequences

No Build Alternative

The No Build Alternative would not result in any change in existing conditions. Therefore, the No Build Alternative would not result in adverse effects related to the spread of invasive species.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Construction of the Build Alternative has the potential to result in the spread of invasive plant species via entering and exiting construction equipment that have been contaminated by invasive plant species, the inclusion of invasive plant species in seed mixtures and mulches, and the improper removal and disposal of invasive plant species.

However, in compliance with the Executive Order on Invasive Species, EO 13112, Caltrans policy, and guidance from the Federal Highway Administration (FHWA), any landscaping and erosion control included in the project will not use species listed as invasive. In addition, all equipment and materials used on-site will be inspected for the presence of invasive species and

cleaned if necessary. Therefore, the implementation of the Project will not spread these invasive species with the use of BMPs and will result in no introduction of additional invasive species.

None of the species on the California list of invasive species is used by the Department for erosion control or landscaping. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

No avoidance, minimization, and/or mitigation measures are needed.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

IS-1: The construction contractor shall inspect and clean construction equipment at the beginning of each day prior to transporting equipment to the construction site.

During construction, soil and vegetation disturbance will be minimized to the greatest extent feasible.

During construction, the contractor shall ensure that all active portions of the construction site are watered a minimum of twice daily or more often when needed due to dry or windy conditions to prevent excessive amounts of dust.

During construction, the contractor shall ensure that all material stockpiled is sufficiently watered or covered to prevent excessive amounts of dust.

During construction, soil/gravel/rock will be obtained from weed-free sources.

Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control.

After construction, affected areas adjacent to native vegetation will be revegetated with plant species approved by the District Biologist that are native to the vicinity.

After construction, all revegetated areas will avoid the use of species listed on Cal-IPC's California Invasive Plant Inventory.

Erosion control and revegetation sites will be monitored for 2 to 3 years after construction to detect and control the introduction/invasion of nonnative species.

Eradication procedures (e.g., spraying and/or hand weeding) will be outlined should an infestation occur. The use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the District Biologist and Landscape Architect.

2.4 Construction Impacts

Affected Environment

This section discusses the impacts on various environmental resources from construction of the proposed Build Alternatives.

Construction Sequence

To best discuss the temporary construction impacts related to project approval, a typical construction process is provided. Construction would begin only after all necessary permanent and temporary Right-of-Way has been acquired by the project sponsor. A typical sequence of construction related activity would be as follows: site cleaning, demolition of structures, utility relocation, and facility construction. Construction of both Build Alternative 2 and Build Alternative 3 are each estimated to last 573 working days.

In order to best assess construction related impacts, a generic construction sequence for this type and magnitude of project is discussed. It will ultimately be at the discretion of the contractor how to proceed with construction processes. Temporary construction easements will be necessary for equipment staging areas near the project site.

Step 1: Staging

The first step in construction is preparing the site for construction. This will include surveying and mobilization of equipment after all necessary permits and approvals have been obtained.

Step 2: Site Clearing and Demolition

After staging is complete, the site will be cleared of all existing structures and vegetation in order to proceed with construction. All necessary concrete and asphalt removal and disposal would also occur at this time.

Step 3: Utility Relocation

Utilities that have been identified as interfering with construction will need to be relocated or preserved in place for continued service by the utility provider. To accomplish this, continued coordination with utility providers will be necessary. Each impacted utility would be restored or replaced as near as possible to its former location in accordance with design elements.

Step 4: Road Improvements and Bridge Widen

Road construction and bridge widening would involve clearing, cut-and-fill activities, grading, removing or improving existing roadways, and paving roadway surfaces. Construction of Build Alternative 2 would disturb approximately 0.26 acres of soil and Build Alternative 3 would disturb approximately 0.64 acres of soil. Excess soil is to be disposed of at an offsite disposal facility that is appropriate for the quantity and quality of earthwork to be disposed. To accommodate road improvements, a Traffic Management Plan (TMP) would be developed to reduce the impacts of temporary lane closures and detours.

Environmental Consequences

No Build Alternative

Since the No Build Alternative would not require any construction, no construction impacts would occur.

Build Alternative 2 and Build Alternative 3 (Preferred Alternative)

Land Use

Construction of the Build Alternatives would not impact existing land use or influence growth in the vicinity of the project.

Community Impacts

The purpose of the proposed Project is to ensure that a safe and reliable roadway is available for all traveling public in the Cities of Long Beach and Seal Beach and adjacent regions. None of the Project components will disrupt the existing fabric of the surrounding neighborhoods, change the existing community relationships, interfere with the operation of existing community facilities or public services, affect housing availability, or require the replacement or relocation of any persons or businesses.

Utilities

Several providers have utilities within the Project right-of-way. The proposed Project would require their relocation due to placement conflicts with the proposed improvements, or proximity to proposed improvements and requirements for clearance distances. Utilities that would potentially require relocation include:

- Chevron 8” steel gas lines
- Chevron 8” steel oil line
- Crimson Pipeline steel oil lines (8” and 12”)
- Marathon 6 5/8” steel oil line
- Seal Beach Gas Processing Joint Venture 8” steel gas lines

Existing utilities and those that are relocated would be located within the existing or proposed ROW limits. All utility relocations would be planned and implemented in coordination with utility providers. Although a short-term, temporary interruption in service might occur as facilities are moved from one location to another, no substantial adverse impacts are anticipated.

Emergency Services

Emergency vehicle access would be maintained at all times during construction, with occasional travel delays associated with lane closures and traffic detours. In order to minimize impacts on response times for police, fire, and other emergency services, a Traffic Management Plan (TMP) will be developed and early coordination with these providers will be carried out. These intermittent and temporary traffic changes would not be substantial.

Traffic and Transportation/Pedestrian and Bicycle Facilities

Construction of the proposed Project would temporarily impact automobile, bicycle, and pedestrian traffic. These delays would be temporary in nature and implementation of the TMP and a public outreach campaign would minimize increases in travel time or distance. The TMP shall include, but not be limited to, the following features:

- Utilize changeable message signs and contractor signs to provide project information
- Implement a Construction Zone Enhanced Enforcement Program, freeway service patrol, and California Highway Patrol traffic handling plan

- Incorporate traffic circulation strategies such as night work, lane and access modifications, and temporary traffic signal modifications

- Provide detour routes for roadways, pedestrian routes, bus services, emergency services, and residential and commercial access routes during construction

- Ensure that business access will be maintained at all times during construction

- Establish detour routes outside residential neighborhoods, especially in the case of low-income neighborhoods, as conditions allow

- Perform close and early coordination with utility providers during project design to identify conflicts and plan required utility relocations

Visual/Aesthetics

The presence of construction equipment will likely have the greatest overall impact on visual quality during construction. These impacts will be temporary; the equipment will be present only during construction. These impacts are considered to be minor.

Cultural Resources

If buried cultural materials are encountered during construction, Caltrans policy is that work stops immediately in the area until a qualified archaeologist can evaluate the nature and significant of the find. Work can only resume after the approval to proceed has been given by a qualified Caltrans archaeologist. In the case of human remains discovery, State Health and Safety Code Section 7050.5 requires that all work stops immediately, no further disturbance occur in the immediate vicinity of the remains, and the County Coroner be contacted immediately.

The potential for discovery of archaeological deposits in the area is very unlikely. However, out of an abundance of caution and in deference to Native American concerns, archaeological and Native American monitors will be present during construction.

Hydrology and Floodplain

The hydrology of the San Gabriel River Channel will be temporarily affected during construction with the placement of falsework and construction equipment in the channel. However, all temporarily disturbed areas will be returned to their original condition post-construction.

Water Quality and Stormwater Runoff

Preliminary engineering analysis estimates indicate that the Total Disturbed Soil Area for Build Alternative 2 will be 0.26 acres and the new impervious surface area will be 0.53 acres. The Total Disturbed Soil Area for Build Alternative 3 will be 0.64 acres and the new impervious surface area will be 0.88 acres. Construction would require the use of Temporary Construction Best Management Practices (BMPs) to provide temporary erosion and sediment control. The following Construction Site BMPs are recommended for implementation:

- All drain inlets must be protected to prevent construction materials and debris, including methacrylate resin and sandblasting residue, from entering drainages.

- Temporary construction BMPs will be required such as wind erosion control, sediment tracking control, street sweeping and vacuuming, stabilized construction roadway, spill prevention control, solid waste management, hazardous waste management, sanitary/septic waste management, material delivery and storage, material use, vehicle and equipment cleaning, vehicle and equipment fueling, and vehicle maintenance.

- Temporary construction staging areas and access roads will be used to minimize impacts to USACE, RWCQB, and CDFW jurisdictional waters to the maximum extent feasible and are expected to be restored to pre-project conditions.

- The revegetation of the project areas shall incorporate native plant species, where possible. Any revegetation at the San Gabriel River Bridge (Bridge No. 53-0060) shall exclusively use native plant species. A revegetation plan shall be developed by the District Landscape Architect in coordination with the District Biologist.

Geology/Soils/Seismic/Topography

Groundwater for the project location was encountered between +1.1 ft. to +2.3 ft depths at the bridge location. The groundwater level corresponds generally with the elevation of surface water flow within the trapezoidal channel with rip rap sides.

Due to the proximity of the site to residential and commercial structures, noise and ground vibrations are additional potential issues with regard to driven piles. Pile-driving conditions will need to be evaluated, and if necessary, controlled and monitored to reduce the potential negative impacts from noise/sound and ground vibrations to adjacent structures.

Construction and pile driving would not alter the regional stress regime; thus, it would not contribute to the occurrence of an earthquake or alter the geotechnical properties of the sediment.

Hazardous Waste or Materials

Worker safety and public health are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

Demolition and construction activities associated with the Build Alternatives would pose a limited risk of inadvertent hazardous waste or materials exposure. During construction, exposure to Aerially Deposited Lead (ADL), Asphalt Concrete (AC) debris, yellow thermoplastic striping containing lead and chromium, Asbestos Containing Material (ACM), Lead Based Paint (LBP), Seabed Sediment, lighting fixtures, and Treated Wood Waste (TWW) can be avoided fully, or minimized as needed, through adherence to protocols for the removal, handling, and disposal of such. Furthermore, a project-specific aerially deposited lead investigation will be implemented to more accurately assess lead-impacted soils in the project study area. The scope of aerially deposited lead investigation will be dictated by which Build Alternative is selected, and more specifically, by construction features during the final phases of design.

In addition, groundwater will be encountered during construction that will require dewatering. As a result, groundwater will be tested during the final design phase to assess and determine the extent of potential contamination. The test data will also be necessary when applying for NPDES permits and WDRs from the RWQCB for discharge into municipal storm drains, applying for a permit from the Los Angeles County Sanitation District for discharge to the municipal sewer, or disposal. Groundwater testing will also address potential contamination due to nearby sources and confirm any impacts from past releases.

Air Quality Construction Impacts **(Short Term Impacts)**

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment are also anticipated and would include carbon monoxide (CO), nitrogen oxides (NOx), VOCs, directly-emitted particulate matter (PM10 and PM2.5), and toxic air contaminants (e.g. diesel PM). Ozone (O3) is a regional pollutant that is derived from NOx and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction typically involves clearing, cut-and-fill activities, grading, removing or improving existing roadways, building bridges, and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM10 and PM2.5 and small amounts of CO, SO2, NOx, and VOCs to be of concern. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an additional source of airborne dust after the mud dries. PM10 emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM10 emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

In addition to fugitive dust emissions, heavy duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO2, NOx, VOCs, and some soot particulate (PM10 and PM2.5) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

During project construction, objectionable odors would be mainly related to the operation of diesel-powered equipment and off-gas emissions during road-building activities (e.g. paving and asphalting). SCAQMD Rule 1113 (Architectural Coatings) limits the amount of VOC emissions from paving, asphalt, concrete curing, and cement coatings operations. Construction of the proposed project shall comply with all applicable SCAQMD Rules. While construction equipment on site would generate some objectionable odors, primarily arising from diesel exhaust, these emissions would generally be limited to the project site and would be temporary in nature.

Implementation of project features PF-AQ-1 through PF-AQ-4 and PF-AQ-6 would prevent/and or reduce air quality impacts from construction activities. Additionally, avoidance and

minimization measures AQ-1 to AQ-12 will be implemented as part of the project to reduce construction-related emissions.

Noise Construction Impacts

Noise impacts from construction of the proposed project are a function of the noise generated by construction equipment, the location and sensitivity of nearby receptors, and the timing and duration of noise-generating activities.

The construction of the proposed Project would be conducted over approximately 573 working days, therefore, noise from construction activities may intermittently dominate the noise environment in the area immediately surrounding the project. Caltrans' contractors are required to abide by Caltrans Standard Specifications, which state that noise levels generated during construction must comply with all applicable local, State, and federal regulations, and that all equipment must be fitted with adequate mufflers according to the manufacturers' specifications.

Construction noise levels typically vary depending on the types of activities being performed. Each construction activity generates its own noise characteristics resulting from a mix of construction equipment involved and the related work activity. The loudest construction noise levels are expected to be generated during the demolition phases.

Table 2.4-1 summarizes the noise levels produced by construction equipment that is commonly used on roadway construction projects. Construction equipment is expected to generate noise levels ranging from 70 to 90 decibels (db) at distance of 50 feet, and noise produced by construction equipment would be reduced below that at a rate of about 6 dB per doubling of distance. Therefore, at 100 feet, noise levels would range between 64 dB and 84 dB. Implementation of measures NOI-1 to NOI-4 would control noise during project construction.

Table 2.4-1 Typical Construction Equipment Noise

Equipment Description	L_{max} Noise Limit at 50 feet, dB	Equipment Description	L_{max} Noise Limit at 50 feet, dB
Auger drill rig	85	Gradall	85
Backhoe	80	Grader	85
Bar Bender	80	Horizontal boring hydraulic jack	80
Blasting	94	Hydra break ram	90
Boring jack power unit	80	Impact pile driver (diesel or drop)	95
Chain saw	85	Jackhammer	85
Clam shovel	93	Mounted impact hammer (hoe ram)	90
Compactor (ground)	80	Paver	85
Compressor (air)	80	Pickup truck	55
Concrete batch plant	83	Pneumatic tools	85
Concrete mixer truck	85	Pumps	77
Concrete pump truck	82	Rock drill	85
Concrete saw	90	Scraper	85
Crane (mobile or stationary)	85	Slurry Plant	78
Dozer	85	Slurry trenching machine	82
Dump truck	84	Soil mix drill rig	80
Excavator	85	Tractor	84
Flatbed truck	84	Vacuum street sweeper	80
Front-end loader	80	Vibratory concrete mixer	80
Generator (25 kVA or less)	70	Vibratory pile driver	95
Generator (more than 25 kVA)	82	Welder/Torch	73

Source: Federal Highway Administration (2006).

dB = decibels kVA = kilovolt-amperes L_{max} = maximum instantaneous noise level

Biological Resources

Temporary impacts from construction would affect a total of 1.45 acres of “Waters of the United States” and “Waters of the State”. Impacts to jurisdictional waters are expected to minimal due to the fact that the majority of the proposed work within the San Gabriel River Channel will be from a temporary trestle and scaffolding, and because avoidance and minimization measures would be implemented. Before construction can begin, a Section 404 of the Clean Water Act Permit from the U.S. Army Corps of Engineers, a Section 401 of the Clean Water Act Permit from the California Regional Water Quality Control Board, and a 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife, will all be required. The project shall adhere to any conditions required by these permits.

Temporary Construction Easement (TCE) areas will be established to minimize impacts to San Gabriel River Channel and disturbance to upstream and downstream habitat outside of the work area.

There are no critical habitats or natural communities of special concern within the Biological Study Area (BSA); therefore, no impacts to special habitats or natural communities would occur

with the implementation of the proposed Project. The project would not impact any Essential Fish Habitat or designated critical habitat since none is located within the vicinity of the bridge location.

According to U.S. Fish and Wildlife Service (USFWS) IPaC website, California Natural Diversity Database (CNDDB), and California Native Plant Society (CNPS), 1 special-status plant species occurs within the BSA based on field surveys, Southern tarplant. The proposed Project is not expected to affect or impact the Southern tarplant population within the BSA, with the implementation of avoidance minimization measures. According to CNDDB and USFWS IPac, the following special status animal species have the potential to occur within the BSA: Green sea turtles and California least tern. During field surveys, none of the special status animal species were observed. The proposed Project is not expected to affect or impact any special-status species due to seasonal construction work windows and presence of a biological monitor during construction.

Removal of vegetation could result in the loss of nesting habitat for bird species protected by the Migratory Bird Treaty Act (MBTA). Any impacts to nesting migratory birds will be protected by implementation of the MBTA, pre-construction nesting bird surveys, and inclusion of Specification 14-6.03B bird protection.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance and minimization measures identified in each resource section in this document would serve to minimize construction impacts.

2.5 Cumulative Impacts

Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

The California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR) Section 1508.7.

Methodology

The Cumulative Impacts Analysis for the San Gabriel River Bridge Rail Upgrade and Widen Project was conducted in accordance with *Caltrans' Guidance for Preparers of Cumulative Impact Analysis* (Caltrans June 2005). Analysis follows the eight-step approach for developing a Cumulative Impact Analysis:

1. Identify resources to consider in the Cumulative Impact Analysis
2. Define the study area for each resource
3. Describe the current health and historical context for each resource
4. Identify direct and indirect impacts of the proposed project that might contribute to a cumulative impact
5. Identify other reasonably foreseeable actions that affect each resource
6. Assess potential cumulative impacts
7. Report the results
8. Assess the need for mitigation

Affected Environment

The intent of the proposed Project is to provide the traveling public with a reliable and safe bridge structure on SR-1 at the San Gabriel River Channel that will facilitate travel for all user types within the City of Long Beach and the City of Seal Beach. The project does not pose any potential for incursion into surrounding neighborhoods or undeveloped lands, or a geographic location that is conducive to influencing growth, whether resulting from physical constraints,

planning and zoning factors, or local political considerations because it is not capacity increasing by design.

The circumstances of the proposed Project's setting places certain limitations on potential new development that might occur adjacent to the proposed Project site and thereby contribute to cumulative impacts of the type that occur when multiple projects are located in nearby proximity. Future development in the vicinity of the Project is governed by the land use specific plan known as the Southeast Area Specific Plan (SEASP), as defined in the Long Beach General Plan. The SEASP is one of the few areas in the City of Long Beach where vacant land for future development exists. However, the Project study area is also adjacent to the Los Cerritos Wetlands and other vacant land parcels with no future plans for development, in an effort to promote conservation of environmental resources. Growth and development trends in the project area are geared towards limiting growth to protect natural resources. Table 2.1-3 in Section 2.1.1 shows Major Development/Transportation Projects near the Project Study Area.

Environmental Consequences

Potential cumulative impacts on each resource are evaluated for both construction and operation of the proposed Project. Build Alternatives 2 and 3 for the proposed Project are similar in project footprint and are considered to have similar cumulative impacts in this analysis. Cumulative impacts identified for the proposed Project result from the past, present, and foreseeable future actions within Long Beach, Seal Beach, and the broader region.

Resources not Substantially Affected by Cumulative Impacts

Land Use and Planning: The Build Alternatives are consistent with local and regional land use and transportation plans. Only a minor amount of acquisitions would necessitate the conversion of adjacent land uses to transportation. The proposed Project would not prevent the City of County from developing their future land use plans. No changes to City of County land use designations would occur. The Project would not contribute to any cumulative land use impacts.

Community Impacts: Project implementation would not divide neighborhoods or cut off any dependent land uses from each other. Public access to roadways, parks, recreational facilities, businesses, and the Coast will be maintained through implementation of a Traffic Management Plan for vehicle users and pedestrians.

Environmental Justice: Minority or low-income populations are not disproportionately affected by project approval. Minority and low-income populations are anticipated to have equal access to the improvement benefits provided by all the projects in the region. Similar projects in the region would also benefit the community by improving safety and multimodal facilities. No cumulative effects are anticipated in relation to environmental justice.

Utilities and Emergency Services: Only temporary construction related impacts are expected on utilities and emergency services. A limited number of utilities would be impacted, and the impact would be less than significant after coordination with utility owners. Similar projects in the Cities of Long Beach and Seal Beach may also require temporary construction related impacts on utilities and emergency services. These projects would have Traffic Management Plans in place to minimize construction impacts. Cumulative effects on utilities and emergency services are not anticipated.

Traffic and Transportation/Pedestrian and Bicycle Facilities: Construction of the proposed Project would likely have short-term effects on traffic and accessibility. However, these effects would be minimized through construction staging and a Traffic Management Plan to be implemented during construction. Construction of each Build Alternative will last 573 working days. It is assumed that nearby projects would also implement similar methods to minimize temporary traffic impacts during construction. If such projects are in construction during the

same period as the proposed Project, coordination between project proponents would be initiated to ensure that construction-related traffic impacts are not compounded by multiple projects being in construction at the same time. Any cumulative, construction-related effects on traffic and facilities would be short term and temporary in nature, and less than significant. The proposed Project is not a capacity-increasing project, and there would be no long-term cumulative impact to traffic.

The proposed Project would improve multimodal travel on SR-1. Project improvements would improve safety for all user types and would not contribute to cumulative impacts on traffic and transportation.

Cultural Resources: It is unlikely that construction of the Project would result in the discovery of previously unknown cultural resources. However, out of an abundance of caution and in deference to Native American concerns, Caltrans will implement archaeological and Native American monitoring of project-related ground-disturbing activities as provided in PF-CUL-1. Should any cultural resources be unearthed, the proper measures (PF-CUL-1 and PF-CUL-2) would be implemented. Should human remains be uncovered, PF-CUL-3 will be followed. Therefore, the project will not contribute to cumulative impacts on cultural resources.

Hydrology and Water Quality: Much of the Project area is already developed with a well-established drainage system. Existing facilities can be assumed to be able to capture the runoff from precipitation and convey that runoff to an existing drainage channel. The Project, as well as other related projects, would be required to comply with the County guidelines for drainage and would require the development of a WPCP that specifies water quality and storm water BMPs that will reduce pollution in storm water discharges. Any planned, approved, and reasonably foreseeable development in the Project area would incrementally increase the amount of impervious surface and decrease the amount of groundwater recharge. The impacts of this cumulative development on the local surface and subsurface hydrology would be less than significant.

Geology/Soils/Seismicity/Topography: The nature of the proposed Project site is an urban-like, coastal setting. The Project is not expected to pose any adverse impacts to any natural or unique geologic landmarks or landforms. There are no existing geologic conditions that would pose significant limitations on development as long as they are addressed through common design and engineering processes and practices, including adherence with seismic design criteria. Projects in the region would also be required to implement seismically safe features. Projects in the region, including this one, would not have cumulative effects to geologic conditions.

Hazardous Wastes or Materials: During construction, hazardous contaminants may be encountered in soils/groundwater in associated and adjacent properties, and in areas adjacent to the roadway mainline, which would be addressed through soil testing and standard avoidance and minimization measures to reduce potential project and cumulative impacts.

Although the project will produce limited amounts of hazardous materials, these quantities are limited, and their presence would be temporary. After disposal at appropriate disposal facilities during construction, the project would not further contribute to the production of hazardous materials. Hence, no significant impact on regional hazardous materials are expected. Similar projects in the area use the same methods when handling and disposing of hazardous waste material. Therefore, the culmination of these projects would not contribute to cumulative impacts since the project would not add to hazardous waste streams once the project is complete.

Air Quality: Construction-related emissions from the proposed Project in combination with the same emissions from any related projects or projects of concern in the South Coast Air Basin that are occurring concurrently have the potential to create short-term, cumulative impacts to

local air quality; however, these impacts would be temporary in nature and would be minimized by complying with SCAQMD rules and air quality management regulations during construction. The anticipated length of construction under Build Alternatives 2 and 3 is 573 days. The proposed project is not a capacity increasing project and is limited to upgrading the bridge structure and adding roadway safety improvements. There would be no increases in vehicle emissions during the project's operational phase that could lead to degradation of air quality.

In addition, related projects of concern within the South Coast Air Basin would not expose sensitive receptors to substantial localized pollutant concentrations, nor would they contribute to regional operational emissions that would cause exceedances of established SCAQMD threshold levels. Related projects are not anticipated to create objectionable odors that would affect a substantial number of people during construction or long-term operation. There would be no increase in cumulative impacts to air quality.

Noise: During Project construction, temporary increases in ambient exterior noise levels are anticipated on a short-term and intermittent basis throughout the project site and immediately adjacent areas due to the use of construction equipment. Therefore, any increase in noise would be a direct result of construction activities. With adherence to applicable Caltrans and local construction-related noise standards, the Project would not contribute individual noise impacts that would contribute individual noise impacts that would contribute to a cumulative effect on noise. In terms of nearby projects of concern, these projects would also be subject to local noise standards, while Caltrans projects would also be required to adhere to agency noise provisions during construction. As a result, increase in construction noise that would collectively contribute to cumulative impacts on noise are not anticipated.

The Project is intended to upgrade the bridge railing and widen the bridge to current safety standards. The bridge structure will consist of the same number of travel lanes (i.e. two in each direction) and would thus add no vehicle capacity. As a result, no significant increase in noise due to project operations is anticipated because there will be no increase in vehicle capacity. Traffic conditions on SR-1 would not be substantially altered from current conditions. Operations associated with the Project do not involve activities or land uses that would directly produce a significant increase in ambient noise levels. Collectively, any projects of concern near the study area are not anticipated to contribute to cumulative noise impacts.

Biological Resources: The Project is located over the San Gabriel River Channel and in the coastal zone. Potential impacts to biological resources will be minimal with proper avoidance and minimization measures, as discussed in Section 2.3 Biological Environment.

Construction of the Build Alternative could temporarily impact nesting birds protected under the Migratory Bird Treaty Act (MBTA). With implementation of Project Feature PF-BIO-1, vegetation removal or tree-trimming activities would take place outside the nesting season. Should vegetation removal or tree-trimming activities be necessary during the bird nesting season, preconstruction surveys would be performed within three days of vegetation removal/construction activities to identify the locations of any nests and to set up exclusionary buffer areas if nests are present. No construction or clearing would take place within these buffer areas until the qualified biologist determines that the young have fledged the nest or the nest is no longer active. Therefore, potential temporary impacts during project construction to nesting birds would not be adverse and there would be no substantial cumulative effect to bird species related to the proposed project. Similar to the proposed Project, other projects in the region have the potential to directly or indirectly impact animal species during construction and/or operation. Other planned projects would also avoid, minimize, or mitigate impacts as a result of construction activities or operation of the projects.

No roosting bats or their signs were observed at any potential roosting structure. No potential roosting within the BSA would be impacted. The proposed Project is not expected to impact special-status species or other bat species. Green sea turtle and California least tern have the suitable habitat present in the BSA. However, none of these special-status animal species were observed during field surveys. The project may affect not likely to adversely affect green sea turtles. Informal consultation with NMFS is ongoing and was considered necessary is documented in Section 4 of this environmental document.

The Build Alternatives is not likely to impact special-status plant species. ESA fencing would be implemented to avoid impacts to Southern tarplant communities occurring in the project vicinity. The Build Alternatives would not substantially increase the potential for spread of invasive species.

No wetlands are present within the BSA. With implementation of the Statewide Construction General Permit described in Project Feature PF-WQ-1, the provisions of the Section 404 Nationwide Permit (USACE), Section 401 Certification (RWQCB), Section 408 Civil Works Permit, and 1602 Lake and Streambed Alteration Agreement (CDFW), impacts to jurisdictional waters at this bridge location would be minimized to the greatest extent feasible. Impacts to jurisdictional waters are expected to be minimal due to the majority of the proposed work being conducted from a temporary trestle and scaffolding. Permanent impacts would only result from the installation of the 24 CISS piles that will be installed for the bridge widening (approximately 0.0108 acres of permanent impact).

The Project is located in an urbanized, coastal area with sparse vegetation. There is no vegetation under the bridge structure. The primary biological effects in the region occurred with the original construction of the roadways. The Project would not result in cumulative impacts to animal species in combination with other planned projects.

Visual/Aesthetics: The Build Alternatives would not substantially change the existing views of and from SR-1. Overall, the Project would comply with Coastal Act policies for bridge railing design. No views of the coast will be impeded with the implementation of the Project. The bridge structure improvements would improve multimodality for pedestrians and bicyclists traveling at slower speeds who can have more time to view the visual resources in the surrounding environment. Other projects in the coastal zone would be required to comply with coastal policies for structure design. The Build Alternatives would not contribute to cumulative effects to visual resources.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance and minimization measures are identified in each topical section in this document would serve to minimize cumulative impacts to the extent feasible. As each project is evaluated for environmental impacts, project-specific avoidance and minimization measures would apply, which would reduce the cumulative impacts.

Chapter 3 – California Environmental Quality Act (CEQA) Evaluation

3.1 Determining Significance under CEQA

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated May 27, 2022, and executed by FHWA and Caltrans. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Environmental Setting

Please refer to Chapter 2.1.5 Visual/Aesthetics for a discussion of Aesthetic project setting.

CEQA Significance Determinations for Aesthetics

a) Have a substantial adverse effect on a scenic vista?

No Impact- The proposed project would not have a substantial adverse impact on a scenic vista because the project area does not include any scenic vistas.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact- The proposed project would not substantially degrade scenic resources due to the fact that none of the components of the project site are in an area containing unique scenic resources. The Project is on an eligible State scenic highway, but the site is not officially designated as a scenic highway. The proposed project would not diminish the elements that make the highway eligible for scenic status.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact- As discussed in the Visual/Aesthetics section in Chapter 2, the proposed project would upgrade the bridge railing to a barrier in compliance with the Caltrans and California Coastal Commission agreement for bridge railings within coastal zones. The Build Alternatives for the project would also include the construction of several retaining walls

along the project limits. This portion of SR-1 within the project limits is eligible for designation as a scenic highway. Viewer sensitivity in the area is considered low.

The proposed project includes context-sensitive design solutions, including the use of earth tones and other aesthetic treatments on the retaining walls. These project features would blend the retaining walls into the project setting. The retaining walls have also been designed to be as low in profile as possible.

The proposed project would not diminish the views that make the highway eligible for scenic status. Therefore, the project as designed would not substantially degrade the visual character and quality of the site and would have less than significant impacts to scenic resources and visual character. No mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact- The proposed project would not include new lighting elements in an area in which there is currently no lighting.

AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Setting

The California Environmental Quality Act (CEQA) requires a review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other users. There are no agricultural or forestry resources located in the vicinity of the project.

CEQA Significance Determinations for Agriculture and Forest Resources

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact- The proposed project does not include any area that has been designated Prime Farmland, Unique Farmland, or Farmland of Statewide Significance. Therefore, no farmland would be converted as a result of this project.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact- There are no parcels under a Williamson Act contract within the project limits.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact- There are no lands zoned for forest land, timberland, or Timberland Production within the project area.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact- The proposed project would not result in the loss of forest land or conversion of forest land to non-forest land use because there is no forest land in the project vicinity.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact- There are no farmlands nor forest lands near the project.

AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

CEQA Significance Determinations for Air Quality

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact- The project area is located in the South Coast Air Basin (SCAB) and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SCAQMD is the primary agency responsible for writing the Air Quality Management Plan (AQMP) in cooperation with SCAG, local governments, and the private sector. The Project area is currently in nonattainment for ozone (O3) (federal, state), PM10 (state only), PM2.5 (federal, state), and lead (federal, state). The Project area is in attainment-maintenance of the federal PM10 standard and of the federal CO standard. The Project area is in attainment of the state standards for Carbon Monoxide (CO), Nitrogen Dioxide (NO2), Sulfur Dioxide (SO2), Visibility-Reducing Particles, Sulfates, and Hydrogen Sulfide (H2S). The designations for Visibility-Reducing Particles, Sulfates, and Hydrogen Sulfide are only applicable to state standards. When a project takes place in an area of nonattainment, a hot spot analysis is required under 40 CFR 93.109. However, due to the proposed scope of work and pursuant to 40 CFR 93.126, this Project is deemed exempt from the requirement to determine conformity.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact- The AQMP provides the blueprint for meeting state and federal ambient air quality standards. This project is not a capacity-increasing transportation project. It will have no impact on traffic volumes and would generate a less than significant amount of pollutants during construction due to the very short duration of project construction. The proposed project is included in SCAG's most recent RTP and RTIP both of which were found to be conforming (see Air Quality section of Chapter 2). Therefore, the proposed project will not

conflict with the AQMP, violate any air quality standard, or result in a net increase of any criteria pollutant. Impacts will be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact- During construction minimization measures will be implemented to reduce the effects on sensitive receptors, including dust-reducing measures, proper upkeep of equipment and vehicles, use of low-sulfur fuel, and storage of equipment and materials at least 500 feet from sensitive receptors. Designation of areas at least 500 feet around receptors will be established, within which idling, material storage, and equipment maintenance will be prohibited as feasible.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact- The use of diesel-powered equipment and emissions from road-building activities may generate some objectionable odors during project construction, which will be temporary and limited to the Project site. These odors can be minimized by conducting certain construction activities at least 500 feet away from sensitive receptors when feasible. The project will comply with construction standards adopted by the South Coast Air Quality Management District (SCAQMD) as well as Caltrans standardized procedures for minimizing air pollutants during construction. Impacts will be less than significant.

BIOLOGICAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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 Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

CEQA Significance Determinations for Biological Resources

a) *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 Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?*

Less Than Significant With Mitigation Incorporated- The potential to impact a number of sensitive species has been identified. These are: Southern Tarplant (a CRPR 1B.1 plant); Green Sea Turtle, a federally threatened species; several bat species identified as Species of Special Concern, including Mexican free-tailed bats, Yuma myotis, and big brown bats; and fully protected bird species, such as the California least tern.

These species could potentially be found within the project area and if present and impacts could be considered significant. Caltrans has identified several avoidance, minimization, and mitigation measures to ensure that any impacts are kept to a level that is less than significant. See Section 2.3 and Appendix E for more details.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant With Mitigation Incorporated- The Biological Study Area (BSA) for this Project encompasses the Project site and includes a buffer of 100 feet in each direction. The Natural Environment Study (NES)(December 2021) prepared for this Project states that no critical habitats or natural communities of concern are located within the BSA. This Project would not affect riparian habitat or other sensitive communities; however, 0.0108 acres of Coastal waters will be permanently impacted through the addition of new concrete piles. Per Coastal Commission requirements, these impacts will be mitigated at a ratio of 3:1. The details of this mitigation will be determined during the Coastal Development Permitting process.

Special-status plants and animals, including those listed as threatened or endangered under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA), CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants were reviewed for the Project area. To find potential special-status species, the California Natural Diversity Database (CNDDB) and the USFWS IPaC website were referenced, and several field surveys were conducted.

13 special-status plant species and 33 special-status animal species were identified as having potential to occur in or near the Project site. Of these species, one plant species and two animals species were indicated as having potential habitat within the Project area or the area adjacent to the Project (listed in table below); other species with potential for presence in the Project area are discussed in Chapter 2. However, none of these species were found during field surveys, and they are not anticipated to be present in the BSA. If any listed or protected plant or animal species are discovered, all work must stop and the Caltrans District Biologist must be contacted. No work shall continue until coordination with USFWS and/or CDFW has been undertaken and a protection plan implemented.

The San Gabriel River is a perennial flow river/channel, which is a tributary to the Pacific Ocean. Surface flow in the river/channel is year-round and assumedly supplied by urban runoff and tidal influence during dry months. San Gabriel River Channel has an earthen bottom within the BSA. The width of San Gabriel River is approximately 300 feet wide from northside top of bank to southside top of bank within the proximity of the San Gabriel River Bridge.

The following coordination with regulatory agencies has taken place to identify potential issues of concern:

- Coordination with USACE was initiated May 18, 2021 via email with Stephanie Hall regarding construction activities that would occur within San Gabriel River, and to notify her that Caltrans will be submitting a 404-permit application. USACE responded via email to notify Caltrans that a Section 408 permit will be required if the affected portion of San Gabriel River channel is within the limits of a L.A. County Flood Control.

- Coordination with NMFS was initiated on September 1, 2021 via email with Jessica Adams to discuss informal consultation. As there is no Essential Fish Habitat within the

BSA at the bridge site. The species under the jurisdiction of NMFS at this location is green sea turtles (*Chelonia mydas*).

- Coordination with CDFW was initiated on October 20, 2021 via phone and email to Erika Cleugh regarding construction activities that would occur within the San Gabriel River.

- Coordination with RWQCB was initiated November 2, 2021 via email with Asley Olmeda regarding construction activities that would occur within San Gabriel River, and to notify her that Caltrans will be submitting a 401-permit application.

- Coordination with USFWS was initiated November 2, 2021 via email with Sally Brown to discuss early input from USFWS. USFWS staff confirmed via email on November 15, 2021 that they do not have concerns about the project having impacts on any federally listed species.

There is potential for noise impacts to nesting migratory birds during the nesting bird season, to prevent these impacts, nesting bird surveys will be conducted two weeks prior to construction, and potential exclusionary devices and methods may be considered. If any nesting songbirds or raptors are found within the project footprint or BSA, a nesting bird buffer zone of 150 feet (songbirds) or 500 feet (raptors) must be established until fledglings have left the nest.

This Project must employ all appropriate Stormwater and Erosion Control Best Management Practices (BMPs) during construction, and these must be incorporated into the project specifications. Prior to the start of construction all drain inlets must be protected with BMPs to prevent construction materials and debris, including methacrylate resin and sandblasting residue, from entering drainages. Temporary Construction BMPs will be required such as wind erosion control, sediment tracking control, street sweeping and vacuuming, stabilized construction roadway, spill prevention control, solid waste management, hazardous waste management, sanitary/septic waste management, material delivery and storage, material use, vehicle and equipment cleaning, vehicle and equipment fueling, and vehicle maintenance.

Impacts to sensitive species, habitats, and communities are less than significant with mitigation.

Common Name (*Scientific Name*)	**Status**	**General Habitat Description**	**Habitat: Potential/Absent**	**Conclusion and Rationale**
Plants				
southern tarplant (*Centromadia parryi ssp. australis*)	CNPS 1B.1	Marshes and swamps (margins), valley and foothill grassland (vernally mesic), vernal pools	Habitat Present	General habitat for this species is present within the vicinity of the project. As the general habitat within the project area is patchy and marginal, the species is not expected within the project area.
Wildlife				

Green turtle (*Chelonia mydas*)	FT	Marine bay	Habitat Present	General habitat for this species is present within the vicinity of the project. As the general habitat within the project area is patchy and marginal, the species is not expected within the project area.
California least tern (*Sterna antillarum browni*)	FE, SE, FP	Tidal flats, sea coasts, and bays. Nests along the coast from San Francisco Bay south to northern Baja California. Nests on barren to sparsely vegetated site near water, usually on sandy or gravelly substrate.	Habitat Present	General habitat for this species is present within the vicinity of the project. As the general habitat within the project area is patchy and marginal, the species is not expected within the project area.

Status: Federal Endangered (FE); Federal Threatened (FT); Delisted (D); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Species of Special Concern (SSC)

Status (California Rare Plant Rank): 1A-Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere; 1B-Plants Rare, Threatened, or Endangered in California and Elsewhere; 2A-Plants Presumed Extirpated in California, But Common Elsewhere; 2B-Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere; 3-Plants about Which More Information is needed - A Review List; 4-Plants of Limited Distribution. Threat Ranks: 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat); 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat); 0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No Impact- The Project activities would not affect any wetlands. There would be no impact.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

No Impact- This project will not affect any migratory wildlife corridors or the movement of any native resident or migratory fish or wildlife species. This project will not impede the use of native wildlife nursery sites.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

No Impact- This project will not conflict with any local policies or ordinances protecting biological resources.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No Impact- This project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

CULTURAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

CEQA Significance Determinations for Cultural Resources

a) *Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

No Impact- There are no historical resources within the Project limits.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

No Impact- There are no archaeological resources within the Project limits. In the case of unanticipated discoveries, proper measures will be taken as provided in PF-CUL-1 and PF-CUL-2.

c) *Disturb any human remains, including those interred outside of dedicated cemeteries?*

No Impact- There are no human remains expected within the Project limits. In the case of unanticipated discoveries of human remains, proper measures will be taken as provided in PF-CUL-3. Specifically, if human remains are discovered during site preparation, grading, or excavation, California State Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the Los Angeles County Coroner shall be contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the Caltrans District 7 Environmental Branch Chief for Cultural Resources and the District Native American Coordinator so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

ENERGY

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

CEQA Significance Determinations for Energy

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact- Construction equipment working on the Project are expected to be recent-year and meet recent fuel efficiency standards. The Project will not result in wasteful, inefficient, or unnecessary energy consumption.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact- The State of California has a policy of attaining 50 percent of California's electricity from renewable resources by 2025 and 60 percent by 2030. There is nothing in this Project that would conflict with state or local plans for renewable energy or energy efficiency. There would be no impact.

GEOLOGY AND SOILS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

CEQA Significance Determinations for Geology and Soils

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact- The project is not located within an Alquist-Priolo Earthquake Fault Zone. There are no active or potentially active faults with the potential for rupture directly beneath the project site. Therefore, there would be no impact due to the rupture of a known earthquake fault.

ii) Strong seismic ground shaking?

Less Than Significant Impact- The project would include the widening of the bridge structure which could be affected by ground shaking due to an earthquake. However, the project would be constructed to meet current seismic design criteria and would not increase exposure to existing hazards in the area. Impacts are less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact- Based on U.S. Geological Survey's Seismic Hazard Zones, the bridge site and surrounding has been mapped in a liquefiable area with potential for permanent ground displacements. Geotechnical exploration will be conducted to determine soil types and strengths, corrosion, and susceptibility to liquefaction. Once the required site exploration is completed, the Office of Geotechnical Design will prepare foundation design recommendations in order to facilitate the selection for the type of bridge foundation that is appropriate for the given soil/geologic condition. Therefore, impacts due to liquefaction would be less than significant through appropriate seismic design criteria.

iv) Landslides?

No Impact- The project site is located on relatively level ground, with no large adjacent slopes nearby. Additionally, the project site is not located in a seismic hazard zone with respect to seismically induced landslides. Therefore, no impact due to landslides is anticipated**.**

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact- Project construction would expose areas to the risk of erosion and loss of topsoil. However, as standard practice, stormwater BMPs would be implemented to minimize the potential for this occurring. Impacts are considered to be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact- Please see responses to questions (a) (iii-iv) and Section 2.2.3 Geology/Soils/Seismic/Topography. Further geological surveys will be conducted at the project site and with current seismic design criteria adhered to, impacts are expected to be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact- The Project site primarily sits on sandy loam soils and the primary hydrologic soil group is Type A. Expansive soils are fine-grained clay minerals. The project is not located in an area known to contain expansive soils as defined in Table 18-1-B of the Uniform Building Code. No impact is expected.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

No Impact- The Project would not include any facilities that would require the use of septic tanks or alternative waste water disposal systems. There would be no impacts.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact- The potential to encounter paleontological resources or unique geologic features in the Project area is unlikely. The Project is in an area comprised primarily of Artificial Fill. In the event that paleontological resources are encountered, avoidance and minimization measure PAL-1, as stated in Section 2.2.4, shall be implemented.

GREENHOUSE GAS EMISSIONS

CEQA Significance Determinations for Greenhouse Gas Emissions

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact- The primary Greenhouse Gas (GHG) Emissions produced by the transportation sector are CO2, CH4, N20, and HFCs. CO2 emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH4 and N20 are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address GHG emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation v. San Diego Assn. Governments (2017) 3 Cal.5th 497, 512). In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130)).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits GHG must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions of GHG
This Project is deemed exempt from conformity requirements pursuant to 40 CFR 93.126 and is not anticipated to result in an increase in operational GHG emissions as no additional roadway capacity will be added.

Construction Emissions of GHG
Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as long pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during

construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Construction GHG emissions are estimated for the Project using the latest CAL-CET2020 version 1.0; and are summarized in Table 3.2-1 and Table 3.2-2 below.

Table 3.2-1 Build Alternative 2 Construction GHG Emissions Estimates

Project Phases	Total Emissions (tons)			
	CO_2	CH_4	N_2O	CO_2e
Land Clearing/Grubbing	7	0.000	0.000	7
Roadway Excavation & Removal	46	0.001	0.002	47
Structural Excavation & Removal	60	0.002	0.004	61
Base/Subbase/Imported Borrow	111	0.004	0.005	112
Structure Concrete	213	0.007	0.011	216
Paving	16	0.000	0.001	16
Drainage/Environment/Landscaping	21	0.001	0.001	21
Traffic Signalization/Signage/Striping/Painting	82	0.002	0.006	84
Project Total	555	0.017	0.030	564

Table 3.2-2 Build Alternative 3 Construction GHG Emissions Estimates

Project Phases	Total Emissions (tons)			
	CO_2	CH_4	N_2O	CO_2e
Land Clearing/Grubbing	9	0.000	0.000	9
Roadway Excavation & Removal	57	0.002	0.003	58
Structural Excavation & Removal	74	0.002	0.005	76
Base/Subbase/Imported Borrow	136	0.004	0.006	138
Structure Concrete	261	0.008	0.013	265
Paving	20	0.001	0.001	20
Drainage/Environment/Landscaping	26	0.001	0.001	27
Traffic Signalization/Signage/Striping/Painting	100	0.003	0.007	102
Project Total	682	0.021	0.037	694

According to the estimates provided by CAL-CET2020, Alternative 2 is expected to generate a total of 564 tons of CO2 equivalents while Alternative 3 is expected to generate a total of 694 tons of CO2 equivalents. Construction for either Alternative 2 or Alternative 3 is expected to last 573 days.

The project GHG emissions would have a less than significant impact on the environment. GHG reduction measures are proposed in the Climate Change section (Section 3.3) of this document, as part of the project-level GHG reduction strategies.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact- The applicable State policy to address GHG emission reduction is AB 32 (Assembly Bill 32 Overview). AB 32 continues to be implemented at the statewide level. Caltrans Standard Specifications Section 14-9 (2018) requires compliance with all applicable laws and regulations related to air quality during construction, including SCAQMD's Rules and local ordinances.

The proposed Project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) 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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) 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?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

CEQA Significance Determinations for Hazards and Hazardous Materials

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Impact- *Section 2.2.5 Hazardous Waste/Materials* has identified the potential for the presence of Seabed Sediment, Asbestos Containing Material (ACM), Lead Based Paint (LBP), Aerially Deposited Lead (ADL), Yellow Thermoplastic/Paint Traffic Striping, and Asphalt Concrete (AC) debris. All standard Best Management Practices and Standard Special Provisions will be followed for the removal and transport of materials to an appropriate disposal facility. Therefore, no impact is anticipated.

b) 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?

Less Than Significant Impact- Section 2.2.5 Hazardous Waste/Materials has identified the potential to result in the disturbance of materials that could potentially contain Seabed Sediment, ACM, LBP, ADL, Yellow Thermoplastic/Paint Traffic Striping and AC debris. The project features PF-HAZ-1 through PF-HAZ-4 and minimization measures HAZ-1 through HAZ-9 would be implemented as part of the Project and would ensure that the potential impacts would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact- The proposed project is not located within one-quarter mile of an existing or proposed school, therefore no impact will occur. The nearest school facilities are J.H. McGaugh Elementary School (1.1 mile); Naples Elementary School (1.9 miles); and Charles F. Kettering Elementary (2.3 miles).

d) 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?

No Impact- Neither the Project site nor the adjoining parcels are located on the "Cortese List" of hazardous materials sites as compiled pursuant to Government Code Section 65962.5/ Therefore, no impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact- The Project area is not located within an airport land use plan nor within two miles of a public airport or public use airport. Therefore, no safety hazard for people residing or working in the Project area would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact- As described in *Section 2.1.8 Traffic and Transportation/Pedestrian and Bicycle Facilities*, the construction of the proposed Project would result in temporary impacts to traffic circulation and pedestrian access in the project vicinity. These impacts could include short-term closure of the San Gabriel River Bike Trail and existing facilities.

The temporary closures and detours may result in short-term effects on emergency response and evacuation along and in the vicinity of the Project limits.

Project Feature (PF-T-1) requires the preparation prior to construction, and the implementation during construction of a Transportation Management Plan (TMP). Additionally, Project Feature (PF-UES-2) would require coordination with emergency service providers for ramp or road closures. Collectively, these project features would specifically address requirements for coordination with emergency service providers and accommodation of emergency travel routes

and access to, through, and around active construction areas. With implementation of the identified project features, potential impacts related to emergency response times and plans would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact- Most of the land surrounding the Project area has been developed as commercial or residential properties. Although there is some vacant, undeveloped land near the Project, it is not located in an area that could be considered an urban-wildlands interface. Therefore, there would be no impacts.

HYDROLOGY AND WATER QUALITY

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

The State Water Resources Control Board and Regional Water Quality Control Boards are responsible for establishing the water quality standards (objectives and beneficial uses) required by the Clean Water Act and for regulating discharges to ensure compliance with the water quality standards. These guidelines are set forth in California's Porter-Cologne Act, enacted in 1969, that provides the legal basis for water quality regulation within California.

A Stormwater Data Report (SWDR) was completed by Caltrans in February 2022. The results of the SWDR were consulted when making impact determinations regarding Hydrology and Water Quality.

CEQA Significance Determinations for Hydrology and Water Quality

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact- There is a potential for temporary impacts to water quality in the San Gabriel River Channel due to construction activity. However, a Water Pollution Control Plan (WPCP), including water diversion, would be implemented to ensure that impacts are avoided or minimized to the greatest extent practicable.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact- Project construction would require the use of water for dust suppression activities. This use would be minimal and short term. Once operational, the Project would not require the use of water. There would be no impact.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on- or off-site;

No Impact- The Project will implement Best Management Practices (BMPs) during construction activities to reduce pollutants in the drainage channels, the carrying of sediments onto local streets, or the removal and loss of soil. At all access points from the construction sites to the local streets, devices will be installed to reduce the tracking of sediment onto public roads by construction equipment. Street sweeping and vacuuming will also be used to remove tracked soil particles from paved roads to prevent the sediment from entering the drainage channels and from polluting local streets.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less Than Significant Impact- The new impermeable surface area for each Build Alternative is less than 1 acre. Therefore, a less than significant impact is anticipated due to project implementation.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

(iv) impede or redirect flood flows?

Less Than Significant Impact- The project is anticipated to increase stormwater volumes due to an increase of impervious surface area associated with the bridge widening. However, the new total impervious surface area is minimal. For Build Alternative 2, the new impervious surface is 0.53 acres and for Build Alternative 3 the new impervious surface is 0.88 acres. The proposed Project will not increase potential sediment load of downstream flow. In addition, this project will not cause hydraulic changes to a stream that may affect downstream stability.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact- The Project is located within a 100-year floodplain; however, the area is at low risk for flooding due to levees on either side of the channel. The Sea Level Rise Analysis prepared for this project showed that the San Gabriel River Bridge would not be overtopped. Based on sea level rise and base flood elevation (BFE) modeling, the earliest estimated year of a 1% AEP storm event surcharge, combined with backwater effects, occurring at the bridge is 2059. Additionally, the modeled tsunami surcharge event has the potential to generate the highest water surface elevation. Therefore, it is recommended that special consideration for scour due to a tsunami event be considered when designing new foundations for the Project or any new structures over the San Gabriel River for SR-1 in the future.

With sea level rise observed in the analysis, adaptation measures would need to be constructed to allow the existing infrastructure along the San Gabriel River to continue to operate. The recommended adaptation measure in this section assumes that the existing levees will need to be raised in order to adapt for sea level rise. Since these levees provide flood protection that is recognized by FEMA and protect many homes behind them, it is a valid assumption that either USACE, the Los Angeles County Flood Control District, or some other governmental entity will raise these levees in the future to adapt for climate change and sea level rise. The project would not expose roadway users to existing flood risks.

A seiche is a standing wave in an enclosed or partially enclosed body of water (similar to the sloshing of water in a bathtub). Seiches have been observed on larger lakes, reservoirs, harbors, and bays, and in smaller ocean areas that are substantially surrounded by land. The Project site is located approximately one (1) mile upstream from the coast over the San Gabriel River Channel, therefore, the Project would not expose roadway users to any existing seiche risks.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact- The proposed Project would implement Project Feature PF-WQ-2 which would ensure that should groundwater dewatering become necessary during construction, the proposed Project would comply with the requirements of one of three orders, or any subsequent orders that apply to groundwater discharges to surface waters, depending on the nature of the groundwater being discharged to surface waters. With the implementation of the applicable project features and minimization measures, the proposed project would not obstruct implementation of any water quality control plan. There would be no impact.

LAND USE AND PLANNING

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

CEQA Significance Determinations for Land Use and Planning

a) Physically divide an established community?

No Impact- The proposed Project is located on existing SR-1 roadway (Bridge No. 53-0060) and is designed to improve multi-modal transportation in the area and upgrade the existing bridge structure to current standards. The Project would not physically divide an established community.

b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

No Impact- In keeping with both the City of Long Beach and The City of Seal Beach's General Plans, the proposed Project would enhance safety, maintain and improve viewability of coastal resources, and increase mobility for all user types. See Section 2.1.1.2 Consistency with State, Regional, and Local Plans and Section 2.1.1.3 Coastal Zone for the Build Alternatives consistency with applicable regulations. Therefore, there would be no impact.

MINERAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

CEQA Significance Determinations for Mineral Resources

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact- No mineral resources that would be of value to the region and the residents of the state are known to occur in the vicinity of the project area. Therefore, no impact is expected.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact- There are no locally-important mineral resource recovery sites delineated on any local general plan, specific plan, or other land use plan in the vicinity of the project. Therefore, there would be no impact.

NOISE

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

CEQA Significance Determinations for Noise

a) 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?

When determining whether a noise impact is significant under CEQA, the baseline noise level is compared against the build noise level. The CEQA noise analysis is completely independent of the NEPA analysis discussed in Chapter 2, which is centered on noise abatement criteria. Under CEQA, the assessment entails looking at the setting of the noise impact and then how large or perceptible any noise increase would be in the given area. Key considerations include: the uniqueness of the setting, the sensitivity of the noise receptors, the magnitude of the noise increase, the number of residences affected, and the absolute noise level.

The project area is largely urban, with businesses, multi-family residences, and some vacant land in the project vicinity. The receivers of any noise increases are primarily residences and some businesses. The proposed Project is not a capacity increasing highway project. There would be no induced growth as a result of the Project improvements. Therefore, operational noise levels will not increase due to this project.

During construction, noise levels would not expose sound receivers to significant noise levels. See question b) for further explanation. Therefore, under CEQA, a less than significant noise impact would occur as a result of the project and no mitigation is required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact- Groundborne vibration typically originates from construction activities such as blasting, pile driving, and operating heavy-duty equipment. These effects are

usually experienced indoors and are typically limited to a 100 foot radius around the source. The nearest sensitive receptor is 150 feet away. To minimize noise impacts to sensitive receptors, the contractor shall ensure appropriate noise mitigation measures are implemented, including: changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noises. Compliance with Caltrans Standard Specifications will limit unnecessary and excessive sources of vibration. Therefore, less than significant impacts are anticipated.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact- The project is not within the vicinity of a private airstrip, airport land use plan, nor within two miles of a public use airport. There will be no impacts.

POPULATION AND HOUSING

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

CEQA Significance Determinations for Population and Housing

a.) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact- The proposed project would not increase capacity nor induce population growth. It would not directly, nor indirectly, result in the construction of new homes or businesses. There would be no impact.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact- Build Alternative 2 would require six (6) Temporary Construction Easements (TCEs) and would not require any relocations of businesses or residences. Build Alternative 3 would require the partial acquisition of four (4) easements and six (6) TCEs. The easements and TCEs would not result in any relocations of businesses or residences. No construction of replacement housing would be necessary. There would be no impact.

PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

CEQA Significance Determinations for Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) Fire protection?

And

ii) Police protection?

And

iii) Schools?

And

iv) Parks?

And

v) Other public facilities?

No Impact- The project would not generate an increase in population nor in travel to/throughout the area. It would not generate additional need for additional public services that would lead to development of new or altered facilities. Therefore, there would be no impact.

RECREATION

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

CEQA Significance Determinations for Recreation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact- The nearest park facilities to the project site are Marina Community Park, Star Carlton Park, Electric Avenue Greenbelt, and Gum Grove Park, which are all located within 0.5 miles of the project area. The San Gabriel River Bike Path also passes through the project site. However, the project would not generate an increase in population nor in travel to/through the area. It would not lead to additional use of existing parks or recreational facilities. There would be no impact.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact- The Project would not include recreational facilities nor require the construction or expansion of recreational facilities. There would be no impact.

TRANSPORTATION

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

CEQA Significance Determinations for Transportation

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact- The proposed improvements would not conflict with any local or regional transportation plans; instead, the Project would bring this section of SR-1 into compliance with the City of Long Beach's General Plan and Caltrans Complete Streets policy. Currently, SR-1 at PM 0.04 has shared shoulders/bike lanes and sidewalks that are below standard widths, which does not meet the goals of either the General Plan or the Complete Streets policy. Pedestrian facilities are inconsistent and exhibit a gap in sidewalk continuity. The Project would upgrade the bridge railing to standard and provide increased safety for all user types.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact- The Project would have no impact on vehicle miles traveled (VMT). No additional travel lanes will be added. This Project is not a capacity-increasing project.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact- The Project will not introduce any dangerous intersections or road hazards. It will improve pedestrian and bike safety by providing wider sidewalks and shoulders. The bridge railing will be upgraded to current standards. There would be no impact.

d) Result in inadequate emergency access?

No Impact- The Project will not impede emergency access to the surrounding area. Appropriate detours will be available during project construction. Implementation of the TMP will provide detours (PF-T-1). Additionally, consultation with emergency services will be a part of the project as outlined in PF-UES-2.

TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

CEQA Significance Determinations for Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k),

No Impact- There are no Tribal Cultural Resources within the Project limits.

b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

No Impact- There are no Tribal Cultural Resources within the Project limits. A Sacred Lands File (SLF) search by the Native American Heritage Commission (NAHC) indicated the presence of Native American cultural sites within the vicinity of the Project area. The NAHC also provided a list of Native American representatives to contact for information on cultural sites in the area of the Project footprint. Caltrans contacted all Native American representatives on the NACH list via letters and emails on January 13, February 2, and October 27, 2021. Caltrans received responses from three of the groups contacted.

Ms. Joyce Perry of the Juaneno Band of Mission Indians Acjachemen Nation-Belardes requested copies of site records for P-19-000272 and for sites on Landing Hill. Ms. Perry also requested that a Native American observer be on site for ground disturbing activities.

Mr. Andrew Salas on the Gabrieleno Band of Mission Indians-Kizh Nation expressed concerns regarding the project and provided information on the Salas family history and familial ties to the project vicinity. Mr. Salas further stated that the presence of any cultural materials within the project area, even if these are secondary deposits, are of importance to the tribe.

The results of the cultural resources study was shared with Mr. Morales, Mr. Salas, and Ms. Perry and, out of an abundance of caution and in deference to their concerns, Caltrans will implement archaeological and Native American monitoring of project-related ground-disturbing activities. As outlined in project features PF-CUL-1 and PF-CUL-2, should there be any discovery of archaeological materials, construction activities shall halt and the protocols and procedures outlined in the Post-Review Discovery and Monitoring Plan (PRDMP) prepared for the project will be followed. In addition, should human remains be uncovered, the procedures and protocols outlined in PF-CUL-3 and the PRMDP will be followed.

UTILITIES AND SERVICE SYSTEMS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals??	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

CEQA Significance Determinations for Utilities and Service Systems

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact- Utility lines currently mounted to the underside of the bridge include natural gas, electricity, and oil lines. These utility lines are within the direct impact area of the project site and would be temporarily relocated during project construction. Coordination with utility providers will take place to ensure there are no disruptions in services. The coordination, and ensuing measures, will result in less than significant impacts. Additional Information regarding utility relocation can be found in Section 2.1.3.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact- The use of water during construction would be limited to water trucked to the site for dust control. The amount of water used during construction would be minimal. The proposed Project would not require the water serving districts serving the Project study area to provide new or expanded entitlements to meet the need for water during construction and operation of the Project. There would be no impacts.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact- The proposed project would not require additional capacity for wastewater treatment, as project construction and operation would not generate wastewater or otherwise increase the volume of wastewater requiring treatment by a provider. Therefore, there would be no impact.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact- Proposed project operation would not result in the regular generation of solid waste. Therefore, there would be no impact, and no mitigation would be required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact- As a transportation improvement project, the proposed project would not require landfill capacity or solid waste disposal. Operation of the proposed project would not generate solid waste and municipal waste collection would not be needed. Therefore, regulations related to solid waste would not apply and no impact would occur.

WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

CEQA Significance Determinations for Wildfire

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

And

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

And

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

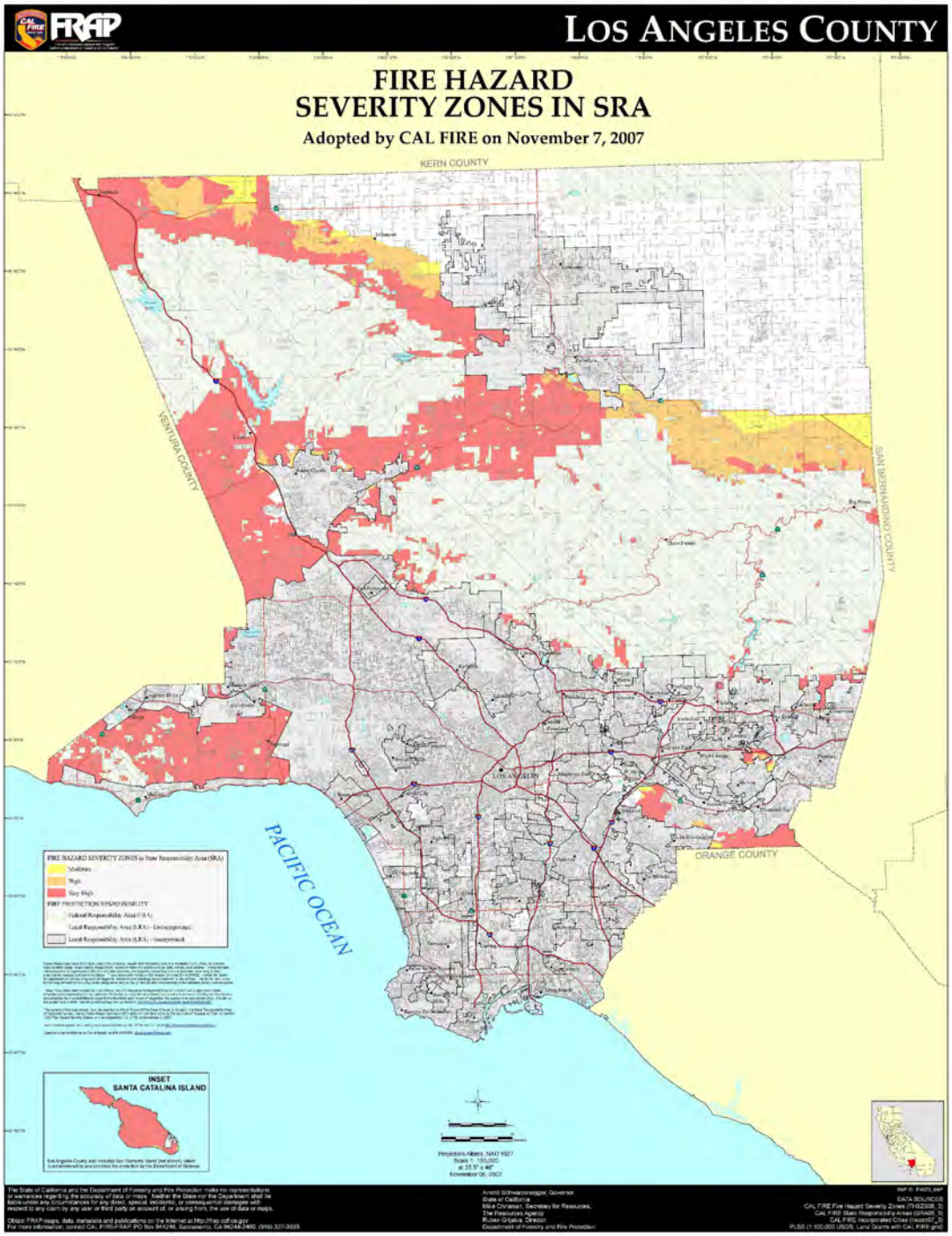
And

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact- State Responsibility Area (SRA) lands are defined based on land ownership, population density and land use. They do not include populated areas, incorporated cities, agricultural lands, or lands administered by the federal government. The Project site is not located in or near any state responsibility areas.

Lands classified as very high fire hazard severity zones are identified in **Figure 3.2-1**. The Project is not located in or near a High Fire Severity Zone.

Figure 3.2-1 Fire Hazard Severity Zones



MANDATORY FINDINGS OF SIGNIFICANCE

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

CEQA Significance Determinations for Mandatory Findings of Significance

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant with Mitigation Incorporated- The proposed project includes roadway widening and improvements on SR-1 at the San Gabriel River Bridge (Bridge No. 53-0060). In the Natural Environment Study (NES), it was determined that the project would not reduce the habitat of a fish or wildlife species, cause a wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal upon implementation of project features, avoidance, minimization, and mitigation measures. Please refer to Section 2.3 Biological Environment for more detailed information as well as specified project features and avoidance and minimization measures. Chapter 2.5 Cumulative Impacts also discusses the effects on the biological environment. There are no potential impacts pertaining to the elimination of important examples of the major periods of California history or history. These resource impacts would be less than significant with mitigation.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact- Section 2.5, Cumulative Impacts, discusses the cumulative impacts of the Build Alternatives in light of several other past, present, and reasonably foreseeable future projects in the area. The Build Alternatives would result in improved safety and operating conditions on and around SR-1 compared to the No Build Alternative and would not contribute to cumulative adverse effects to other resource areas. Therefore, the impacts of the Build Alternatives are not considered cumulatively considerable and are less than significant. No mitigation is required.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

With incorporation of project features and avoidance and minimization measures identified throughout this environmental document, all potential impacts would be less than significant. The proposed Project would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Therefore, these impacts would be less than significant, and no mitigation would be required.

3.3 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia, or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to GHG emissions generated from the production and use of fossil fuels.

Human activities generate GHGs consisting primarily of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG; while it is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO_2.

The impacts of climate change are already being observed in the form of sea level rise, drought, extended and severe fire seasons, and historic flooding from changing storm patterns. The most important strategy to address climate change is to reduce GHG emissions. Additional strategies are necessary to mitigate and adapt to these impacts. In the context of climate change, "mitigation" involves actions to reduce GHG emissions to lessen adverse impacts that are likely to occur. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

REGULATORY SETTING

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values— "the triple bottom line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

The federal government has taken steps to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) as amended by the Energy Independence and Security Act (EISA) of 2007; and Corporate Average Fuel Economy (CAFE) Standards. This act established fuel economy standards for on-road motor vehicles sold in the United States. The U.S. Department of Transportation's National Highway Traffic and Safety Administration (NHTSA) sets and enforces the CAFE standards based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States. The Environmental Protection Agency (U.S. EPA) calculates average fuel economy levels for manufacturers, and also sets related GHG emissions standards under the Clean Air Act. Raising CAFE standards leads automakers to create a more fuel-efficient fleet, which improves our nation's energy security, saves consumers money at the pump, and reduces GHG emissions (U.S. DOT 2014).

U.S. EPA published a final rulemaking on December 30, 2021, that raised federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026, increasing in stringency each year. This rulemaking revised lower emissions standards that had been previously established for model years 2021 through 2026 in the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part Two in June 2020. The updated standards will result in avoiding more than 3 billion tons of GHG emissions through 2050 (U.S. EPA 2021a).

State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$). [GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent," or CO_2e. The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.] Finally, it requires the Natural Resources Agency to update the state's climate adaptation

strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

SB 743**,** Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150**,** Chapter 150, 2017, Regional Transportation Plans: This bill requires ARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

EO N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

ENVIRONMENTAL SETTING

The proposed project is in an urban area of Los Angeles County with a well-developed road and street network. The project area is comprised of mixed land uses including vacant/open space, commercial, and residential buildings. The route in the project area is heavily used during peak hours. The Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) guides transportation and housing development in the project area.

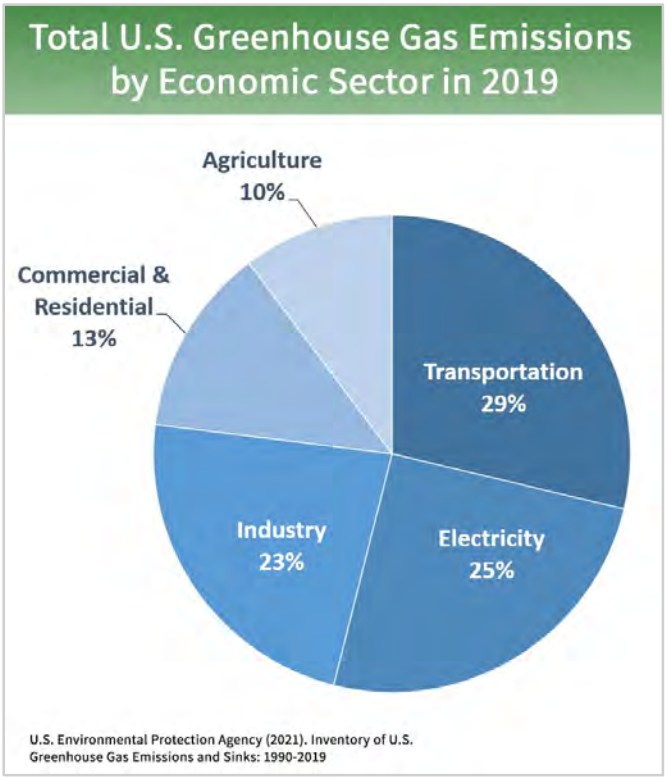
GHG Inventories

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4. Cities and other local jurisdictions may also conduct local GHG inventories to inform their GHG reduction or climate action plans.

NATIONAL GHG INVENTORY

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. The 1990-2019 inventory found that overall GHG emissions were 6,558 million metric tons (MMT) in 2019, down 1.7 percent from 2018 but up 1.8% from 1990 levels. Of these, 80 percent were CO_2, 10 percent were CH_4, and 7 percent were N_2O; the balance consisted of fluorinated gases. CO_2 emissions in 2019 were 2.2 percent less than in 2018, but 2.8 percent more than in 1990. As shown on Figure 3.4-1, the transportation sector accounted for 29 percent of U.S. GHG emissions in 2019 (U.S. EPA 2021b, 2021c).

Figure 3.3-1 U.S. 2019 Greenhouse Gas Emissions (Source: U.S. EPA 2021d)



STATE GHG INVENTORY

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2021 edition of the GHG emissions inventory reported emissions trends from 2000 to 2019. It found total California emissions were 418.2 $MMTCO_2e$ in 2019, a reduction of 7.2 $MMTCO_2e$ since 2018 and almost 13 $MMTCO_2e$ below the statewide 2020 limit of 431 $MMTCO_2e$. The transportation sector (including intrastate aviation and off road sources) was responsible for about 40 percent of direct GHG emissions, a 3.5 $MMTCO_2e$ decrease from 2018 (Figure 3.4-2). Overall statewide GHG emissions declined from 2000 to 2019 despite growth in population and state economic output (Figure 3.4-3) (ARB 2021a).

Figure 3.3-2 California 2019 Greenhouse Gas Emissions by Economic Sector
(Source: ARB 2021a)

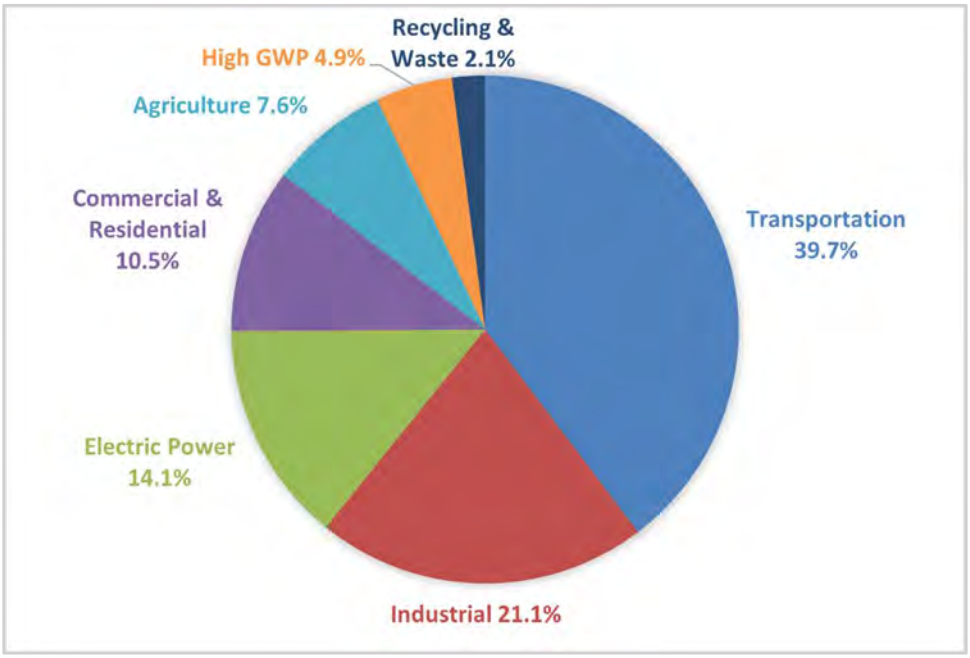
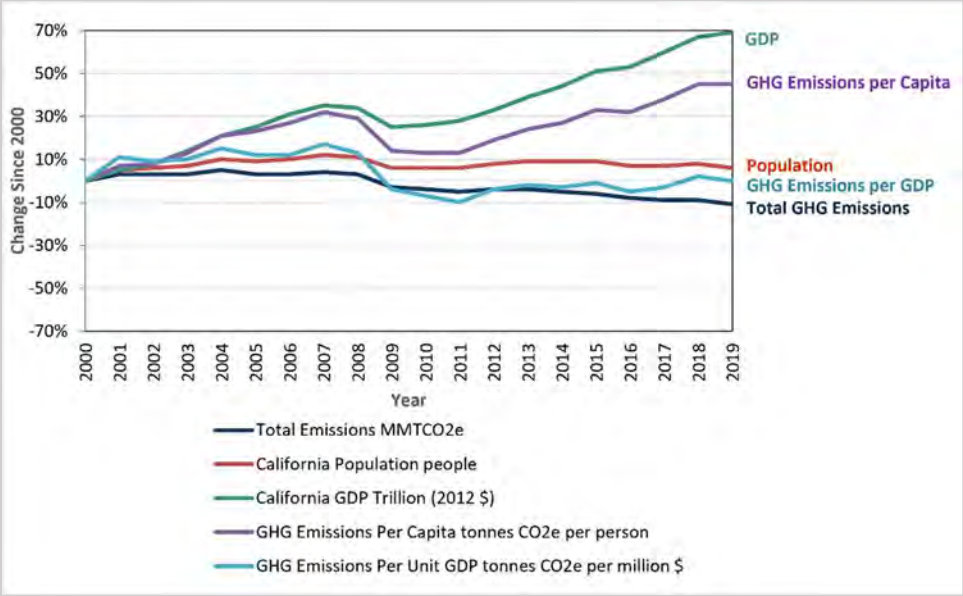


Figure 3.3-3 Change in California GDP, Population, and GHG Emissions since 2000 (Source: ARB 2021a)



AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

Regional Plans

ARB sets regional GHG reduction targets for California's 18 metropolitan planning organizations (MPOs) to achieve through planning future projects that will cumulatively achieve those goals, and reporting how they will be met in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the RTP/SCS for the Southern California Association of Governments (SCAG). The regional reduction target for SCAG is 19 percent by 2035 (ARB 2021b).

PROJECT ANALYSIS

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System (SHS) (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH_4 and N_2O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation *v.* San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512). In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

The purpose of the proposed project is to bring the San Gabriel River bridge railing and the bridge width up to the current design standards in order to improve safety. This project is deemed exempt from conformity requirements pursuant to 40 CFR 93.126 and will not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on SR-1, no increase in vehicle miles traveled (VMT) would occur. The project will also improve options for multi-modal travel by providing standard shoulder widths and sidewalks for use by bicyclists and pedestrians; this may result in some incremental improvement in GHG emissions. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

Use of long-life pavement, improved traffic management plans, and changes in materials, can also help offset emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

Construction GHG emissions are estimated for the project using the latest CAL-CET2020 version 1.0; and are summarized in the tables below.

Alternative 2 Construction GHG Emissions Estimates

Project Phases	Total Emissions (tons)			
	CO_2	CH_4	N_2O	CO_2e
Land Clearing/Grubbing	7	0.000	0.000	7
Roadway Excavation & Removal	46	0.001	0.002	47
Structural Excavation & Removal	60	0.002	0.004	61
Base/Subbase/Imported Borrow	111	0.004	0.005	112
Structure Concrete	213	0.007	0.011	216
Paving	16	0.000	0.001	16
Drainage/Environment/Landscaping	21	0.001	0.001	21
Traffic Signalization/Signage/Striping/Painting	82	0.002	0.006	84
Project Total	555	0.017	0.030	564

Alternative 3 Construction GHG Emissions Estimates

Project Phases	Total Emissions (tons)			
	CO_2	CH_4	N_2O	CO_2e
Land Clearing/Grubbing	9	0.000	0.000	9
Roadway Excavation & Removal	57	0.002	0.003	58
Structural Excavation & Removal	74	0.002	0.005	76
Base/Subbase/Imported Borrow	136	0.004	0.006	138
Structure Concrete	261	0.008	0.013	265
Paving	20	0.001	0.001	20
Drainage/Environment/Landscaping	26	0.001	0.001	27
Traffic Signalization/Signage/Striping/Painting	100	0.003	0.007	102
Project Total	682	0.021	0.037	694

According to the estimates provided by CAL-CET2020, Alternative 2 is expected to generate a total of 564 tons of CO2 equivalents while Alternative 3 is expected to generate a total of 694 tons of CO2 equivalents. Construction for either Alternative 2 or Alternative 3 is expected to last 573 days.

All construction contracts include Caltrans Standard Specifications related to air quality. Section 7-1.02A and 7-1.02C, Emissions Reduction, requires contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations. Section 14-9.02, Air Pollution Control, requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

CEQA Conclusion

While the proposed project will result in GHG emissions during construction, it is anticipated that the project will not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With

implementation of construction GHG reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

GREENHOUSE GAS REDUCTION STRATEGIES

Statewide Efforts

In response to AB 32, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors, to take California into a sustainable, low-carbon and cleaner future, while maintaining a robust economy (ARB 2022).

Major sectors of the California economy, including transportation, will need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Planning and Research identified five sustainability pillars in a 2015 report: (1) Increasing the share of renewable energy in the State's energy mix to at least 50 percent by 2030; (2) Reducing petroleum use by up to 50 percent by 2030; (3) Increasing the energy efficiency of existing buildings by 50 percent by 2030; (4) Reducing emissions of short-lived climate pollutants; and (5) Stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits (OPR 2015).

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). Reducing today's petroleum use in cars and trucks is a key state goal for reducing greenhouse gas emissions by 2030 (California Environmental Protection Agency 2015).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways

that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency released *Natural and Working Lands Climate Smart Strategy Draft* for public comment in October 2021.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

CLIMATE ACTION PLAN FOR TRANSPORTATION INVESTMENTS

The California Action Plan for Transportation Infrastructure (CAPTI) builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

CALIFORNIA TRANSPORTATION PLAN

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021a).

CALTRANS STRATEGIC PLAN

The *Caltrans 2020–2024 Strategic Plan* includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021b).

CALTRANS POLICY DIRECTIVES AND OTHER INITIATIVES

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a Department policy to ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Greenhouse Gas Emissions and Mitigation Report* (Caltrans 2020) provides a comprehensive overview of Caltrans' emissions. The report documents and evaluates current Caltrans procedures and activities that track and reduce GHG emissions and identifies additional opportunities for further reducing GHG emissions from Department-controlled emission sources, in support of Departmental and State goals.

Project-Level GHG Reduction Strategies

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

CC-1: Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment (with some exceptions).

CC-2: Schedule truck trips outside of peak morning and evening commute hours.

CC-3: Schedule longer-duration lane closures to reduce number of equipment mobilization efforts. (Combine with public information efforts for congested areas.)

CC-4: For improved fuel efficiency from construction equipment: Maintain equipment in proper tune and working condition, use right-sized equipment for the job, and use equipment with new technologies.

CC-5: Use alternative fuels such as renewable diesel for construction equipment (where feasible and available).

CC-6: Use solar-powered construction equipment (where feasible and available).

CC-7: Apply earthwork balance: reduce the need for transport of earthen materials by balancing cut and fill quantities. https://www.sustainablehighways.org/764/178/earthwork-balance.html

(The application of this measure is contingent upon soil classifications and disposal guidance listed in Hazardous Waste Specifications. See Environmental Commitments Record).

CC-8: Supplement existing construction environmental training with information on methods to reduce GHG emissions related to construction.

CC-9: Use accelerated bridge construction (ABC) method. (Reduce construction windows, uses more precast elements that in turn reduce need for additional falsework, forms, bracing, etc.).

CC-10: Salvage rebar from demolished concrete and process waste to create usable fill.

CC-11: Maximize use of recycled materials (tire rubber for example).

CC-12: Recycle existing project features on-site (For example, MBGR light standards, Sub-base Granular Material or native material that meets Caltrans specifications for incorporation into new work.)

CC-13: Reduce construction waste. For example, reuse or recycle construction and demolition waste (reduces consumption of raw materials, reducing waste and transportation to landfill; saves costs).

CC-14: Use recycled water or reduce consumption of potable water for construction.

CC-15: Select pavement materials that lower the rolling resistance of highway surfaces as much as possible while still maintaining design and safety standards.

CC-16: Specify Long-Life Pavement. Minimize life-cycle costs by designing long-lasting pavement structures. Consider future climate conditions in decisions. https://www.sustainablehighways.org/764/179/long-life-pavement.html

CC-17: Use permeable pavements to reduce “urban heat islands”. The void structure of pervious concrete acts as insulation and prevents the pavement from storing heat that would otherwise raise air temperatures (resulting in a greater use of air conditioning in nearby buildings). https://blog.nwf.org/2009/12/permeable-concrete-reduces-emissions/

CC-18: Produce HMA using warm mix technology. https://www.fhwa.dot.gov/pavement/asphalt/wma.cfm

CC-19: Replace lighting with ultra-reflective sign materials that are illuminated by headlights to reduce energy used by electric lighting.

CC-20: Elevate mechanical/electrical equipment (in a manner that still fits project design goals and standards).

CC-21: Use corrosion-resistant materials.

CC-22: Improve drainage and improve drainage systems to adapt to localized flooding risks.

ADAPTATION

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways."

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (U.S. DOT 2011).

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. A number of state policies and tools have been developed to guide adaptation efforts.

California's Fourth Climate Change Assessment (Fourth Assessment) (2018) is the state's effort to "translate the state of climate science into useful information for action." It provides information that will help decision makers across sectors and at state, regional, and local scales protect and build the resilience of the state's people, infrastructure, natural systems, working lands, and waters. The State's approach recognizes that the consequences of climate change occur at the intersections of people, nature, and infrastructure. The Fourth Assessment reports that if no measures are taken to reduce GHG emissions by 2021 or sooner, the state is projected to experience a 2.7 to 8.8 degrees Fahrenheit increase in average annual maximum daily temperatures, with impacts on agriculture, energy demand, natural systems, and public health; a two-thirds decline in water supply from snowpack and water shortages that will impact agricultural production; a 77% increase in average area burned by wildfire, with consequences for forest health and communities; and large-scale erosion of up to 67% of Southern California beaches and inundation of billions of dollars' worth of residential and commercial buildings due to sea level rise (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the coastal zone. Major urban airports will be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event will triple to 370 by 2100, and 3,750 miles will be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

In 2008, then-governor Arnold Schwarzenegger recognized the need when he issued EO S-13-08, focused on sea level rise. Technical reports on the latest sea level rise science were first published in 2010 and updated in 2013 and 2017. The 2017 projections of sea level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018. This EO also gave rise to the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan), which addressed the full range of climate change impacts and recommended adaptation strategies. The Safeguarding California Plan was updated in 2018 and again in 2021 as the *California Climate Adaptation Strategy*, incorporating key elements of the latest sector-specific plans such as the *Natural and Working Lands Climate Smart Strategy*, *Wildfire and Forest Resilience Action Plan*, *Water Resilience Portfolio,* and the CAPTI (described above). Priorities in the 2021 California Climate Adaptation Strategy include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, nature-based climate solutions, use of best available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2021).

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change in addition to sea level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and*

Investing for a Resilient California: A Guidebook for State Agencies in 2017, to encourage a uniform and systematic approach.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group to help actors throughout the state address the findings of California's Fourth Climate Change Assessment. It released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*, in 2018. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts (Climate Change Infrastructure Working Group 2018).

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments guide analysis of at-risk assets and development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

Project Adaptation Analysis

Sea Level Rise (SLR)

The findings presented below were obtained from the *Sea Level Rise Impact Analysis* (May 2022) that was prepared for this Project.

The State Route 1 (SR-1) crossing of San Gabriel River at the Project limit (0.04) is a seven-span bridge. The bridge was originally constructed in 1931, widened in 1962, and had earthquake retrofits completed in 1995. The bridge is a simple supported reinforced concrete T-girder bridge on solid reinforced concrete piers that are on untreated timber piles. The end piers for this structure function as strutted abutments. The bridge is 428.3 feet long and approximately 72 feet wide. The bridge deck is approximately at a height of 23.00 North American Vertical Datum of 1988 feet (NAVD 88) based upon reviewing the available bridge plans and statewide Light Detection and Ranging (LiDAR).

Understanding current tidal levels annually and seasonally is important in evaluating potential impacts to SR-1. The National Oceanic and Atmospheric Administration (NOAA) Los Angeles gauge, Station #9410660, was used to categorize sea level trends for SR-1. The current published mean sea level (MSL) elevation is at 2.6 feet (NAVD 88), based on the 1983-2001 Epoch. That period has a mean higher-high water (MHHW) elevation of 5.29 feet (NAVD 88), mean high water (MHW) of 4.55 feet (NAVD 88), mean low water (MLW) of 0.74 feet (NAVD 88), and mean lower-low water (MLLW) elevation of -0.20 feet (NAVD 88).

Previous studies on the San Gabriel River by the United States Army Corps of Engineers and Caltrans state that the drainage area for the river is 675 square miles. The flows of the river are normally regulated by the Whittier Narrows Dam, which was constructed in 1957. During high flow storm events, more water is released into the San Gabriel River up until the 1% annual exceedance probability (AEP) event. For flows above the 1% AEP, the dam has uncontrolled releases. For several miles where it flows in highly urbanized settings, the channel is trapezoidal in shape and made of concrete, later transitioning to natural alluvial channel bottom with riprap sides. Levees are found on both banks of the river in the urban areas in the Project vicinity. The levees near the SR-1 bridge are at an elevation of 14.4 feet (NAVD 88).

The proposed Project will be designed as a permanent feature and was evaluated for Sea Level Rise for three different years: the baseline construction year of 2025, future conditions in 2050, and future conditions in 2100. Bridge No. 53-0060 over the San Gabriel River is currently proposed to be widened under two different Build Alternatives, both of which would widen the existing bridge by 22 feet. Build Alternative 2 would widen the bridge by 11 feet on both sides. Build Alternative 3 would widen the bridge only on the northbound side by 22 feet.

The most current summary of sea level rise projections for the State of California is documented in the California Ocean Protection Council (OCP), Science Advisory Team 2018 report, State of California Sea Level Rise Guidance. The estimates outlined in the report represents a best practice for quantifying sea level rise on the California coastal areas. SLR guidance for this Project was based upon the 2018 OPC Sea Level Rise guidance report. OPC recommends that projects with medium-to-high risk aversion consider the 0.5 percent scenario. This Project focuses on the 0.5 percent likelihood scenario to the assumed design life 2100 because the bridge is a critical transportation asset. The OPC guidance also includes an extreme risk aversion scenario called the “H++ Scenario.” This scenario has an unknown probability and assumes that extreme SLR resulting from the loss of the West Antarctic ice sheet occurs in each projected year. This extreme scenario is typically used for projects with high stakes and long-term decision-making processes. The “H++ Scenario” is presented here for the purpose of illustrating all projected scenarios provided by the OPC. The California OPC Sea Level Rise guidance also provides probabilistic models for sea level rise based upon different emissions projection levels. For these different emissions levels used in the projections for 2050, there are published values for representative concentration pathways (RCP). The discussion of likely or plausible future conditions ranges from RCP 8.5 (high emissions) to RCP 2.6 (low emissions). As of this time, the OPC guidance recommends using the RCP 8.5 emissions scenario due to current global greenhouse gas emissions tracking. Therefore, the values for RCP 8.5 were used for the SLR calculations.

Current estimates from the State of California on sea level rise project, for medium-high to extreme risk aversion levels (which are recommended for critical infrastructure which include this bridge), that sea level rise could be on the order of 6.7-9.9 feet in Los Angeles by 2100 compared to 2000 sea levels. The Project will be designed as a permanent feature and was evaluated for SLR for three different years: the baseline construction year of 2025, and future conditions of 2050 and 2100. Two sea level rise conditions were considered for RCP 8.5: the Medium-High Risk Aversion (0.5% probability sea level rise meets or exceeds) and the upper limit of sea level rise H++, which is often considered overly conservative.

Sea Level Rise model results conducted for the proposed Project, show almost no difference between the two Build Alternatives. For the different scenarios analyzed, the maximum impact due to the Project was less than 0.2 feet.

Using current sea level rise estimates and the bridge soffit (underside of the bridge deck) elevation of 15.94 feet (NAVD 88), the Project should be able to pass the 1% AEP storm event for 2025 sea level rise conditions. The model conducted for the San Gabriel River showed that the Sea Level Rise by 2100 would cause the 1% AEP flood elevation to surcharge the bridge as

it is currently configured. “Surcharge” in this case refers to water level causing a horizontal, lateral pressure load being exerted against the side of the bridge structure. Due to the age of the SR-1 bridge and when it was built, the bridge may not be able to withstand the load of flow surcharging it. It is recommended that a structural engineer evaluate the bridge pier caps, including the curve element that attaches to the soffit, to check the structural soundness of these elements getting surcharged during a flow event.

With a target date of 2100 for the lifetime of the Project, some form of adaptation will need to occur prior to then in order to prevent the SR-1 bridge over the San Gabriel River from becoming surcharged to be able to withstand hydraulic loading on the bridge structure during the 1% AEP storm event. The existing levees will need to be raised in order to adapt for sea level rise. Since the levees near the Project provide flood protection that is recognized by the Federal Emergency Management Agency (FEMA) and protect many homes behind them, it is a valid assumption that either USACE, the Los Angeles County Flood Control District, or some other government entity will raise these levees in the future to adapt for climate change and sea level rise.

The roadway for SR-1, however, at elevation 23.00 feet (NAVD 88) would not be overtopped (overtopping flow occurs when a water detention structure’s capacity is surpassed and flow passes over the structure) except by the estimated tsunami event. 5.82 feet of sea level rise added to the existing 2025 estimated tsunami wave height would cause the bridge to surcharge.

It is recommended that adaptation to accommodate sea level rise and storm events be implemented prior to the currently estimated time frame for project life (2100) to prevent the bridge from becoming surcharged during the 1% AEP storm event. Any adaptation for the roadway that raises it above the 19.20 feet (NAVD 88) worst case scenario from the analysis (2100 RCP 8.5 H++ Sea Level Rise tsunami event) and have a bridge supporting it that could withstand hydraulic loading from the storm and tsunami events modeled in this report would have sufficient height to protect it from overtopping from the 1% AEP storm event and the different downstream boundary conditions modeled in this analysis. The first adaptation measure that could be implemented is adaptive monitoring. Adaptive monitoring would consist of monitoring actual sea level rise and seeing how model projections change over time. If the observed sea level rise and/or model projections end up being higher than currently estimated, then the second and third adaptation measure proposed here could be pursued.

The second adaptation measure being considered in this analysis is raising the bridge deck. This adaptation measure would require a detailed analysis by a structural engineer to verify that the bridge foundations and peers could withstand additional loads caused by the raising. The third adaptation measure being considered is the construction of a new bridge, which would require the old bridge to be removed first. However, unknowns exist that would need to be analyzed further, including obtaining the current state of the existing timber piles and creating a plan to combat the challenges of working in a tidal zone.

The most conservative sea level rise model (RCP 8.5, H++ SLR MHHW) conducted for this Project estimates the earliest year of the bridge soffit being surcharged is 2092. Additionally, the medium-high risk aversion sea level rise model conducted (RCP 8.5, 0.5% SLR) estimates the earliest year the bridge will be surcharged is 2094. Both of these scenarios for the bridge soffit occur prior to the assumed bridge design life date of 2100. Adaptation measures will need to be implemented before the year 2092, and subsequently before design life date of 2100.

Additionally, it is recommended that any adaptation measures also consider the impacts due to a potential tsunami wave event given the predicted depth and velocity of the tsunami wave at the project location.

PRECIPITATION AND FLOODING

The SR-1 crossing at the Project limit (0.04) is bounded on both sides by levees that, per the as-built plans, are under the jurisdiction of the Los Angeles County Flood Control District. Long Beach is within FEMA's Los Angeles County Flood Insurance Study (FIS) area, study number 06037CV001F. The effective FIS is dated June 2, 2021. Both coastal and riverine analysis were included in the study. The coastal analysis documents the overall total water surface elevation, which accounts for the probability of occurrence of coastal still water elevation, wave height and wave runup. Additionally, the effects of tidal backwater flooding are included in the FIS study.

The bridge is located in one of these backwater areas and is in a flood zone characterized as AE (areas subject to inundation by the 1% annual-chance flood event) instead of a coastal VE designation (areas along coasts subject to inundation by the 1% annual-chance flood event with additional hazards due to storm-induced velocity wave action). Because of this AE designation, the SR-1 bridge does not require wave considerations as a part of the analysis. Since the Project is located within a FEMA floodplain, the Project would require a Conditional Letter of Map Revision and later a Letter of Map Revision to be obtained.

The Hydraulic analysis conducted showed that the 1% AEP storm event can still pass under the bridge without hitting the soffit for 2025 conditions with Sea Level Rise. Based on sea level rise and BFE modeling, the earliest estimated year of a 1% AEP storm event surcharge, combined with backwater effects, occurring at the bridge is 2092. Additionally, the modeled tsunami surcharge event has the potential to generate the highest water surface elevation. Therefore, it is recommended that special consideration for scour due to a tsunami event be considered when designing new foundations for the Project or any new structures over the San Gabriel River for SR-1 in the future.

With sea level rise observed in this analysis, adaptation measures would need to be constructed to allow the existing infrastructure along the San Gabriel River to continue to operate. The recommended adaptation measures in this section assumes that the existing levees will need to be raised in order to adapt for sea level rise. Since these levees provide flood protection that is recognized by FEMA and protect many homes behind them, it is a valid assumption that either USACE, the Los Angeles County Flood Control District, or some other governmental entity will raise these levees in the future to adapt for climate change and sea level rise.

Given the age of the San Gabriel River bridge at the Project site, it is likely that the bridge was not designed to withstand loads due to surcharging of the bridge soffit during a storm event. With a target date of 2100 for the lifetime of the Project, some form of adaptation will need to occur prior to then in order to prevent the bridge over the San Gabriel River becoming surcharged or to be able to withstand hydraulic loading on the bridge structure during the 1% AEP storm event. Raising the bridge and replacing the bridge with a new structure should be considered as future adaptation measures. Both of these options would require that SR-1 be raised in the vicinity of the bridge in order to tie into the raised bridge deck elevation required to have a bridge soffit that clears the water during storm events.

Using current sea level rise estimates and the estimated bridge soffit of 14.00 feet (NAVD 88) the project should be able to pass the 1% AEP storm event for 2025 sea level rise conditions.

WILDFIRE

The Project is not located in an area vulnerable to wildfire. The CalFire Fire Hazard Severity Zone Map supporting this determination can be found in Section 3.2 of this environmental document

TEMPERATURE

The District Climate Change Vulnerability Assessment does not indicate temperature changes during the project's design life that would require adaptive changes in pavement design or maintenance practices.

Chapter 4 – Comments and Coordination

4.1 Documenting Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings, public meetings, public notices, Project Development Team (PDT) meetings, and electronic correspondence. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

Consultation and Coordination with Public Agencies and Tribal Governments

Native American Coordination Letters and Responses

Native American consultation and coordination for the project was initiated on January 12, 2021, with a request to the Native American Heritage Commission (NAHC) for a Sacred Lands File (SLF) search for information regarding the presence of sacred lands and cultural resources recorded within or near the project APE.

On January 25, 2021, the NAHC responded that the SLF search result indicated the presence of Native American cultural sites in the vicinity of the project area and provided a list of Native American representatives for further information regarding tribal cultural resources within or near the Project area. Caltrans contacted the following Native American representatives via letters and emails on January 13, February 2, and October 27, 2021.

- Charles Alvarez, Gabrielino-Tongva Tribe
- Robert Dorame, Gabrielino Tongva Indians of California Tribal Council
- Shasta Gaughen, Pala Band of Mission Indians
- Matias Belardes, Juaneno Band of Mission Indians Acjachemen Nation-Belardes
- Joyce Perry, Juaneno Band of Mission Indians Acjachemen Nation-Belardes
- Lovina Redner, Santa Rosa Band of Cahuilla Indians
- Sandonne Goad, Gabrielino/Tongva Nation
- Anthony Morales, Gabrielino/Tongva San Gabriel Band of Mission Indians
- Andrew Salas, Gabrieleno Band of Mission Indians-Kizh Nation
- Scott Cozart, Soboba Band of Luiseño Indians
- Joseph Ontiveros, Soboba Band of Luiseño Indians

Caltrans received responses from three of the groups contacted.
Ms. Joyce Perry of the Juaneno Band of Mission Indians Acjachemen Nation-Belardes requested copies of site records for P-19-000272 and for sites on Landing Hill. Ms. Perry also requested that a Native American observer be on site for ground disturbing activities.

Mr. Andrew Salas of the Gabrieleno Band of Mission Indians-Kizh Nation expressed concerns regarding the project and provided information on the Salas family history and familial ties to the project vicinity. Mr. Salas further stated that the presence of any cultural materials within the project area, even if these are secondary deposits, are of importance to the tribe.

Mr. Anthony Morales of the Gabrieleno/Tongva San Gabriel Band of Mission Indians stated that the project area is highly sensitive for cultural resources. Mr. Morales further stated that a Native American observer needs to be present during ground disturbing activities.

The results of the cultural resources study was shared with Mr. Morales, Mr. Salas, and Ms. Perry and, out of an abundance of caution and in deference to their concerns, Caltrans will implement archaeological and Native American monitoring of project-related ground disturbing activities. As outlined in project features PF-CUL-1 and PF-CUL-2, should there be any discovery of archaeological materials, construction activities shall halt and the protocols and procedures outlined in the Post-Review Discovery and Monitoring Plan (PRDMP) prepared for the project will be followed. In addition, should human remains be uncovered, the procedures and protocols outlined in PF-CUL-3 and the PRMDP will be followed.

Public Agencies

State Historic Preservation Officer

On February 25, 2022, Caltrans in compliance with Section 106 of the National Historic Preservation Act and PRC 5024 MOU sent a letter initiating consultation with the SHPO officer. Caltrans notified SHPO of findings, Native American concerns, and concurrence with Caltrans' determination that a minor phased approach was sufficient given that a Finding of No Historic Properties Affected is likely for this project.

On March 17, 2022, SHPO responded and provided comments to the Phased Identification Plan (PIP) and Post-Review Discovery and Monitoring Plan (PRDMP). On April 1, 2022, Caltrans provided SHPO the revised document, and on April 16, 2022, SHPO responded that they had no further comments and had no objections to Caltrans' minor phased no historic properties affected approach.

California Department of Fish and Wildlife, United States Army Corps of Engineers, and Regional Water Quality Control Board

Jurisdictional areas within the San Gabriel River and BSA total 1.45 acres within CDFW jurisdiction and 1.45 acres within USACE and RWQCB jurisdiction. Coordination with these agencies is summarized below:

- Coordination with USACE was initiated May 18, 2021, via email with Stephanie Hall regarding construction activities that would occur within San Gabriel River, and to notify her that Caltrans will be submitting a 404 permit application. USACE responded via email to notify Caltrans that a Section 408 permit will be required if the affected portion

of San Gabriel River channel is within the limits of a L.A. County Flood Control.

- Coordination with CDFW was initiated on October 20, 2021, via phone and email to Erika Cleugh regarding construction activities that would occur within San Gabriel River. A 1602 Lake and Streambed Alteration Agreement is anticipated to be required prior to the start of construction. A December 15, 2021 and quarterly meeting on February 15, 2022 between Caltrans and CDFW to further discuss anticipated impacts within the San Gabriel River.

- Coordination with RWQCB was initiated November 2, 2021, via email with Asley Olmeda regarding construction activities that would occur within San Gabriel River, and to notify her that Caltrans will be submitting a 401 permit application.

National Marine Fisheries Service

The proposed project would have may affect not likely to adversely affect the season foraging of Green sea turtles in the San Gabriel River Channel. Therefore, the project would need to comply with the federal Endangered Species Act and informal consultation with NMFS is necessary.

Coordination with NMFS was initiated on September 1, 2021, via email with Jessica Adams to discuss informal consultation. As there is no Essential Fish Habitat within the BSA at the bridge site, a no effects concurrence letter from NMFS is being developed to obtain clearance for project activities and was discussed with NMFS during a quarterly meeting on January 12, 2022.

United States Fish and Wildlife Service

Coordination with USFWS was initiated November 2, 2021, via email with Sally Brown to discuss early input from USFWS. USFWS staff confirmed via email on November 15, 2021, that they do not have concerns about the project having impacts on any federally listed species. A follow up email from Caltrans to USFWS was sent regarding the No Effect determination.

California Coastal Commission

A Coastal Development Permit (CDP) will be needed for the San Gabriel River Bridge (Bridge 53-0060) since it is located within the Coastal Zone.

On April 14, 2022 e-mail correspondence was sent by Karl Price (Caltrans Senior Environmental Planner) to California Coastal Commission (CCC) staff requesting input and comments on the Sea Level Rise analysis methodology. The Coastal Commission was also informed that Caltrans would be requesting a Consolidated Coastal Development Permit due to the Project site sitting in an area of dual jurisdiction (CCC and City of Long Beach). California Coastal Commission staff responded to Caltrans via email correspondence on April 27, 2022 with comments on the Sea Level Rise analysis methodology.

City of Long Beach

The project is anticipated to result in a temporary use of the San Gabriel River Bike Path under Section 4(f). Because the temporary use of this Section 4(f) property would not adversely impact the activities, features, or attributes of the Section 4(f) property, a *de minimis* impact determination is anticipated. On April 26, 2022, a virtual meeting was held between Caltrans and the City of Long Beach, as the Official with Jurisdiction (OWJ), to

discuss Section 4(f) and the temporary use of the San Gabriel River Bike Path. Caltrans received concurrence from the City of Long Beach on the Section 4(f) determination on July 27, 2022. Due to a lack of objection, the project action will proceed.

Community Outreach and Public Involvement

Project Development Team Meetings

A PDT was identified to ensure collaborative communication among the stakeholders, which includes representatives from Caltrans. Caltrans District 7 held virtual PDT meetings on a monthly basis and are attended by the engineering Consultant team for Caltrans, TranSystems. The larger PDT consists of engineers, environmental generalists, biologists, archaeologists, paleontologists, and air quality and noise specialists. Monthly PDT meetings are still ongoing. Additional details regarding future PDT meetings will be included within this chapter when available.

Public Participation

A total of four public notices were posted on April 13, 2022, requesting comment on the temporary use of the San Gabriel River Bike Path and *de minimis* impact determination under Section 4(f) by May 15, 2022. No public comments or questions were received during the 30-day public notice period.

No public hearings or workshops have occurred thus far.

Comments and Responses

The Draft IS/EA and public notices were distributed to local agencies, regional agencies, and utility providers affected by the project. In addition, members of the public surrounding the project site were provided opportunities to review and comment on the Draft IS/EA. The 30-day public review period began on October 6, 2022 and ended on November 4, 2022.

The Draft IS/EA and technical studies were made available for review online and hardcopies of the Draft IS/EA were available for public review at the City of Long Beach Department of Public Works office, City of Seal Beach Department of Public Works office, Caltrans District 7 Office. Chapter 6, Distribution List, provides additional information about where and to whom the document was distributed to.

Comments on the Draft IS/EA were received during the public review period. This Final IS/EA was modified to reflect all substantive comments and responses to those comments. Responses to public comments received can be found in Appendix L to this document.

Chapter 5 - List of Preparers

The following Caltrans District 7 staff contributed to the preparation of this Initial Study:

Ronald Kosinski, Deputy District Director, B.A. Geography, California State University, Long Beach; Masters in Urban Planning, California State Polytechnic University, Pomona; 46 years of environmental planning experience. Contribution: Management, including analysis, document editing, and approval.

Karl Price, Senior Environmental Planner, B.S. Biology, California State Polytechnic University Pomona; 24 years of environmental planning experience. Contribution: assistance in project management and document review.

Rocky Rojas, Environmental Planner, B.S. Environmental Science, University of California Los Angeles; 3.5 years of environmental planning experience. Contribution: coordinating project and writing, reviewing, and finalizing the document. Preparation of GIS maps.

Adam Avila, Environmental Planner, B.A. Environmental Studies, University of California, Santa Barbara; 4 years environmental planning experience. Contribution: GIS map preparation and writing appendices.

Paul Caron, Senior District Biologist, B.S. Biology, California State Polytechnic University San Luis Obispo; 30 years of experience in biological surveys, biological technical reports and ecological restoration; 17 of those years as a supervising biologist. Contribution: review and approval of biological technical reports.

Andrew Yoon, Senior Transportation Engineer, Air Quality, B.S. Civil and Environmental Engineering, University of California Los Angeles; 26 years experience in civil and environmental engineering for infrastructure and development projects. Contribution: preparation of air quality technical analysis.

Jin Lee, Branch Chief, Noise and Vibration, B.S. in Civil Engineering (1988), University of Washington; 30 years of experience.

Samer Momani, Associate Environmental Planner, Master of Science in Environmental Studies, California State University; Fullerton; 15 years of experience in environmental planning. Contribution: NEPA Quality Control reviewer and document editing.

George Olguin, Landscape Architect, Bachelor of Science in Landscape Architecture, California State Polytechnic University; Pomona; 30 years of experience in transportation landscape architecture and ecological restoration. Licensed Landscape Architect, California and Arizona. Contribution: Visual Aesthetics review.

Christopher Laurel, Associate Environmental Planner and Caltrans District 7 Paleontological Coordinator. B.A. Environmental Studies, California State University Monterey Bay; 5 years of experience in environmental planning. Contribution: PIR/PER Quality Assurance and Quality Control.

Elaine Lee, Environmental Planner. B.S. Public Health Science, University of California Irvine; Master or Planning, University of Southern California; 6 years of experience in

environmental planning for infrastructure and development projects. Contribution: Assisting with writing and preparation of environmental document.

Mariam Dahdul, Associate Environmental Planner, Ph.D. Anthropology, University of California, Santa Barbara; 20 years of experience in archaeology and cultural resources management. Contribution: preparation of Historic Properties Survey Report and Archaeological Survey Report.

Alison Wong, Associate Environmental Planner. B.S. Atmospheric, Oceanic and Environmental Science, University of California Los Angeles; 5 years of experience in environmental planning. Contribution: technical editing.

Hung Pham, Transportation Engineer. B.S. Civil Engineering, University of Long Beach, California. 14 years of experience in environmental engineering (hazardous waste). Contribution: preparation of hazardous waste assessment.

Anna Johnson, Environmental Planner. M.A. Geography, California State University, Long Beach. Contribution: Preparation of Section 4(f) analysis, writing of environmental document, and preparation of GIS maps.

Aye Htoon, P.E. Transportation Engineer/Noise & Vibration Branch, Office of Environmental Engineering, Division of Environmental Planning. B.E. (Civil), Rangoon Institute of Technology, Rangoon, Myanmar. 17 years of experience of noise study report preparation and Civil and Environmental Engineering project support.

Chapter 6 - Distribution List

The Draft IS/EA or a Notice of Availability will be distributed to elected officials, and local and regional agencies, as well as utility providers affected by the Project.

6.1 Elected Officials

Please see Table 1 for a list of elected officials that will receive a copy of the Draft IS/EA or a Notice of Availability.

Table-1. List of Elected Officials

Federal

U.S. Senate for California – Los Angeles Office

Attn: Senator Dianne Feinstein

11111 Santa Monica Blvd., Suite 915

Los Angeles, CA 90025

U.S. Senate for California – Los Angeles Office

Attn: Senator Alex Padilla

255 E. Temple St., Suite 1860

Los Angeles, CA 90012

Congressional District 47 Office - Gov. G. Deukmejian Courthouse

Attn: Congressman Alan Lowenthal

275 Magnolia Ave., Suite 1955

Long Beach, CA 90802

Congressional District 47 Office - Gov. G. Deukmejian Courthouse

Attn: Mark Pulido, District Director

275 Magnolia Ave., Suite 1955

Long Beach, CA 90802

State

Assembly District 70 – Long Beach Office

Attn: Assembly Member Patrick O'Donnell

5000 E. Spring St., Suite 550

Long Beach, CA 90815

Assembly District 70 – Long Beach Office

Attn: Marisol Barajas, District Director

5000 E. Spring St., Suite 550

Long Beach, CA 90815

Assembly District 72 – District Office

Attn: Assembly Member Janet Nguyen

17011 Beach Blvd., Suite 1120

Huntington Beach, CA 92647

County of Los Angeles

Hall of Administration

Attn: Janice Hahn, Los Angeles County Supervisor District 4

500 W. Temple St.,

Los Angeles, CA 90012

Hall of Administration

Attn: Jamie Hwang, Transportation Deputy District 4

500 W. Temple St.,

Los Angeles, CA 90012

County of Orange

Senate District 34 – District Office

Attn: Senator Tom Umberg

1000 E. Santa Ana Blvd., Ste. 220B

Santa Ana, CA 92701

Senate District 34 – District Office

Attn: Ana Gonzalez, District Director

1000 E. Santa Ana Blvd., Ste. 220B

Santa Ana, CA 92701

Orange County Board of Supervisors

Attn: Andrew Do, Supervisor 1st District

333 W. Santa Ana Blvd.,

Santa Ana, CA 92701

Orange County Board of Supervisors

Attn: Jack Du, 1st District Director

333 W. Santa Ana Blvd.,

Santa Ana, CA 92701

City of Long Beach

Long Beach City Hall

Attn: Robert Garcia, Mayor of Long Beach

411 W. Ocean Blvd., 11th Floor

Long Beach City Hall

Attn: Susie Price, 3rd District Councilwoman

411 West Ocean Blvd., 11th Floor

Long Beach, CA 90802

Long Beach, CA 90802

City of Seal Beach

Seal Beach City Hall

Attn: Joe Kalmick, Mayor of Seal Beach

211 Eighth St.,

Seal Beach, CA 90740

Seal Beach City Hall

Attn: Mike Varipapa, District 3 Council Member

211 Eighth St.,

Seal Beach, CA 90740

6.2 Public Agencies

Please see Table 2 for a list of public agencies that will receive a copy of the Draft IS/EA or a Notice of Availability.

Table 2. List of Public Agencies

Federal

U.S. Environmental Protection Agency Region 9, Environmental Review Office

Attn: Morgan Capilla, NEPA Reviewer

75 Hawthorne St., (ENF-4-2)

San Francisco, CA 94105

U.S. Federal Emergency Management Agency

Attn: Chris Poehlmann, Tribal Liaison Region 9

1111 Broadway, Suite 1200

Oakland, CA 94607-4052

NOAA Fisheries West Coast Region – California Coastal Office

Attn: Anthony Spina, Branch Chief

501 W. Ocean Blvd., Suite 4200

Long Beach, CA 90802-4213

U.S. Fish and Wildlife Service

Attn: Sally Brown

2177 Salk Ave., Suite 250

Carlsbad, CA 92008-7385

U.S. Department of the Interior - Office of Environmental Policy and Compliance

Attn: Steve Tryon, Director

1849 C Street NW,

Washington, DC 20240

U.S. Department of Interior - Office of Environmental Policy and Compliance, Region IX

Attn: Janet Whitlock, Environmental Officer

2800 Cottage Way, Room E-1712

Sacramento, CA 95825

Federal Highway Administration

Attn: Antonia Johnson, Planning Team Leader

650 Capital Mall, Ste 4-100

Sacramento, CA 95814

U.S. Army Corps of Engineers
Los Angeles District

P.O. Box 532711

Los Angeles, CA 90053-2325

Advisory Council on Historic Preservation

Attn: Lynne Richmond, Communications and Public Affairs Specialist

401 F St. NW, Suite 308

Washington, DC 20001-2637

Advisory Council on Historic Preservation

Attn: Carol Legard, FHWA Liaison

1100 Pennsylvania Ave., NW, Suite 809
Old Post Office Building

Washington, DC 20004

State

Office of Planning and Research State Clearinghouse

Attn: Kate Gordon, Director of OPR

1400 Tenth St.,

Sacramento, CA 95814

California Air Resources Board

1001 “I” St.,

P.O. Box 2815

Sacramento, CA 95812

California Energy Commission

Attn: Shawn Pittard, Deputy Director Siting, Transmission, and Environmental Protection

715 P St.,

Sacramento, CA 95814

California Public Utilities Commission – Head Quarters

Attn: Rachel Peterson, Executive Director

505 Van Ness Avenue

San Francisco, CA 94102

Office of Historic Preservation

Attn: Julianne Polanco, SHPO

1725 23rd St., Ste. 100

Sacramento, CA 95816

Native American Heritage Commission

Attn: Raymond C. Hitchcock, Executive Secretary

1550 Harbor Blvd., Suite 100

West Sacramento, CA 95691

California Department of Conservation

Attn: David Shabazian, Director

715 P St., MS 1900

Sacramento, CA 95814

California Resources Agency

Attn: Wade Crowfoot, California Secretary

1416 Ninth St., Ste. 1311

Sacramento, CA 95814

California Department of Fish and Wildlife - South Coast Region 5

Attn: Erika Cleugh, Senior Environmental Scientist

3883 Ruffin Rd.,

San Diego, CA 92123

California Coastal Commission

Attn: Steve Hudson, District Director of South Central Coast and South Coast, Los Angeles County

301 E. Ocean Blvd., Suite 300,

Long Beach, CA, 90802

State Water Resources Control Board

Attn: Eileen Sobeck, Executive Director

P.O. Box 100

Sacramento, CA 95812-0100

Regional

South Coast Air Quality Management District – Office of Legislative and Public Affairs

Attn: Danielle Soto, Public Information Specialist

21865 Copley Dr.,

Diamond Bar, CA 91765

South Coast Air Quality Management District – Office of Legislative and Public Affairs

Attn: Debra Ashby, Public Information Specialist

21865 Copley Dr.,

Diamond Bar, CA 91765

Southern California Association of Governments

Attn: Naresh Amatya, Transportation Planning Manager

818 West 7th St., 12th Floor

Los Angeles, CA 90017

Metropolitan Transportation Authority

Attn: James de la Loza, Chief Planning Officer

1 Gateway Plaza

Los Angeles, CA 90012-2952

Regional Water Quality Control Board

Attn: Renee Purdy, Executive Officer Region 4

320 W 4th St., STE 200,

Los Angeles, CA 90013

Los Angeles County

County of Los Angeles - Department of Public Works

Attn: Mark Pestrella, Director

900 S. Fremont Ave.,

Alhambra, CA 91803

Department of Regional Planning

County of Los Angeles – Environmental Planning and Sustainability Section

320 West Temple St., 13th Floor

Los Angeles, California 90012

California Highway Patrol - South LA Area Office

Attn: Captain Zizi, Commander of LACC

19700 Hamilton Ave.,

Torrance, CA 90502

Orange County

Orange County Public Works

Attn: James Treadway, OCPW Director

P.O. Box 4048

Santa Ana, CA 92702-4048

Orange County Public Works

Attn: Kevin Onuma, OCPW County Engineer

P.O. Box 4048

Santa Ana, CA 92702-4048

City of Long Beach

Long Beach City Hall

Attn: Tom Modica, City Manager

411 W. Ocean Blvd.,

Long Beach, CA 90802

Long Beach City Hall

Attn: Eric Lopez, Director of Public Works

411 W. Ocean Blvd.,

Long Beach, CA 90802

Long Beach City Hall

Attn: Alison Spindler-Ruiz, Planning Bureau Manager

411 W. Ocean Blvd., 3rd Floor,

Long Beach, CA 90802

Long Beach Fire Department

Attn: Xavier Espino, Fire Chief

3205 N. Lakewood Blvd.,

Long Beach, CA 90808

Long Beach Fire Station #8

5365 E. 2 St.,

Long Beach, CA 90803

Long Beach Fire Station #21

225 Marina Dr.,

Long Beach, CA 90803

Long Beach Fire Station #14

5200 Eliot Ave.,

Long Beach, CA

Public Safety Building

Attn: Wally Hebeish, Chief of Police

400 W Broadway,

Long Beach, CA 90802

East Patrol Division

3800 E. Willow St.,

Long Beach, CA 90815

City of Seal Beach

Seal Beach City Hall

Attn: Steve Myrter, Director of Public Works

211 Eighth St.,

Seal Beach, CA 90740

Seal Beach City Hall

Attn: Jill Ingram, City Manager

211 Eighth St.,

Seal Beach, CA 90740

Department of Community Development

Attn: Alexa Smittle, Director

211 Eighth St.,

Seal Beach, CA 90740

Seal Beach Police Department

Attn: Philip L. Gonshak, Chief of Police

911 Seal Beach Blvd.,

Seal Beach, CA 90740

Orange County Fire Authority

Attn: Rob Roberts, Division Chief

211 Eighth St.,

Seal Beach, CA 90740

Orange County Fire Authority Station #44

Attn: Brian Fennessy, Fire Chief

718 Central Ave.,

Seal Beach, CA 90740

Interested Groups, Organizations, and Individuals

Appendix A

Section 4(f) De Minimis Memorandum for the San Gabriel River Bike Path

State Route 1
07-LA-001 PM 0.04
EA 32090

July 2022

STATE OF CALIFORNIA
Department of Transportation

I. Introduction

The following proposed Section 4(f) De Minimis Memorandum (Memo) has been prepared to address the Section 4(f) property within the vicinity of the State Route 1 (SR-1)/San Gabriel River Bridge Rail Upgrade and Widen Project. The United States Department of Transportation Act (USDOT Act) of 1966 included a special provision, Section 4(f), which stipulated that the Federal Highway Administration (FHWA) and other Department of Transportation agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land; and the action includes all possible planning to minimize harm to the property resulting from such use; or

- The FHWA determines that the use of the property will have a de minimis impact.

II. Proposed Section 4(f) *De Minimis* Determination

This section of the document discusses *de minimis* impact determinations under Section 4(f). Section 6009(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of a Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required, and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

III. Project Description, Purpose and Need

Proposed Undertaking. Caltrans is proposing to upgrade the San Gabriel River Bridge (Bridge No. 53-0060) on SR-1 in the City of Long Beach at post-mile 0.04. The scope of work includes:

- Upgrading bridge railing

- Widening the bridge to meet current standard traveled way standards

- Installing new curb ramps at both ends of the bridge to meet the pedestrian/bicycle ramps leading up from the river channel

- Widening the roadway transition to the widened bridge section

- Constructing retaining walls on southbound SR-1 for adjoining roadway transition
- Constructing a 187-ft sidewalk at the southwest end to provide pedestrian sidewalk continuity
- Adding Americans with Disabilities Act (ADA) curb ramps and sidewalks

Work at the San Gabriel River Bridge will require temporary access to the San Gabriel River bike path, a Section 4(f) resource under the jurisdiction of the County of Los Angeles, which crosses underneath. Temporary and intermittent closure of the bike path in the project area below this bridge will be required to mobilize construction equipment and materials, and to ensure the safety of facility users. Temporary protective scaffolding will be installed along the section of the bike path that crosses under the bridge to maintain public access to the bike path throughout the duration of the project.

Project Purpose. The purpose of the proposed project is to bring the San Gabriel River bridge railing and the bridge width to current standards. The structure was identified in the State's Bridge Rail Program for bridge rail replacement.

Project Need. The existing bridge railings do not meet the current standards. This project is needed to continue the District's efforts to eliminate non-standard rail on structures within the District and improve safety.

Figure 1 Project Regional Location

IV. Section 4(f) Resource(s)

The following is a discussion of the Section 4(f) properties within the project study area.

San Gabriel River Bike Path (Los Angeles County Department of Public Works). The San Gabriel River Bike Path is a 35.4 miles multi-use path that runs north to south from Azusa to Seal Beach. Though the path travels through mostly urban and industrialized environments, adjacent parks and natural features help diversify the landscape. The San Gabriel mountains in the distance provide a scenic background for the northern portion of the trail, whereas the ocean serves as a destination point to the south. The path runs directly through the project area under the San Gabriel River Bridge. There will be minimal disruption to movement on the bike path due to the temporary installation of protective scaffolding at the bridge location, which will serve to maintain access to the bike path throughout the duration of the project.

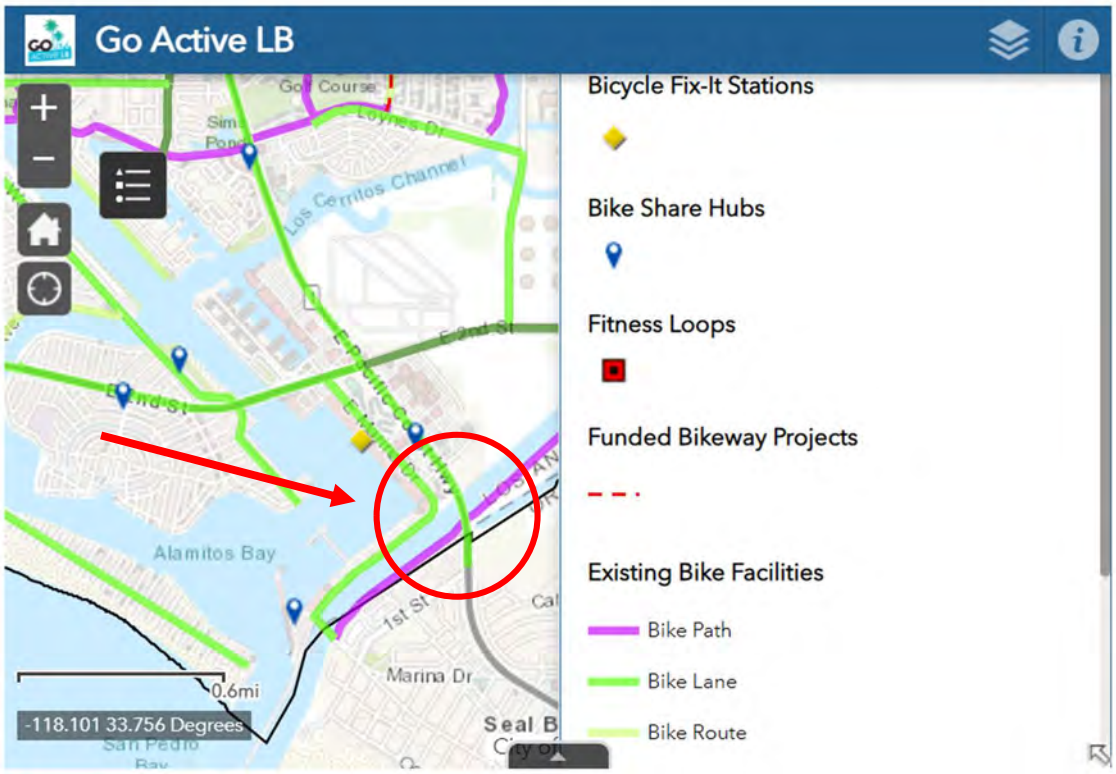


Figure 2 View of the project location in the City of Long Beach Interactive Bike Map

Figure 3 View of project area passing over bike path, looking north along SR-1

Figure 4 View of bike ramp connecting the bike path to SR-1 looking east

Figure 5 View of the bike path crossing under SR-1 looking east

V. Proposed De Minimis Impact Finding

A determination of *de minimis* impacts on parks, recreation areas, and wildlife and waterfowl refuges, may be made where all three of the following criteria are satisfied:

- The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f);

- The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource; and

- The official(s) with jurisdiction over the property are informed of USDOT's intent to make the *de minimis* impact determination based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f).

San Gabriel River Bike Path (City of Long Beach Department of Public Works). The proposed undertaking constitutes a *de minimis* impact of this Section 4(f) protected property. The bike path will experience impacts only during the construction time frame. Access to the bike path will be maintained and available for use throughout the entirety of the construction period. The only times in which the bike path will temporarily or intermittently be unavailable for use would be during the construction of the Temporary Structures–Temporary Supports and during all bridge demolition operations near the temporary supports. Building the temporary supports over the bike lane will take approximately 4-8 hours for construction and take down at the end of construction. The area near the bike path will be used for the movement of construction equipment in and out of the work zone. Equipment will be moved in at the beginning of the day and removed at the end of the day. There are no permanent adverse impacts and no impacts to activities, features, or attributes of the resource. Temporary construction impacts will be minimized through Caltrans Construction Standards and Best Management Practices (BMPs). Following construction, the bike path will be restored to its original condition.

VI. Records of Public Involvement

Impacts to Section 4(f) protected resources are governed by a federal process and compliance with National Environmental Policy Act (NEPA) requirements. The appropriate NEPA approval for the proposed undertaking is a Categorical Exclusion. The proposed undertaking also requires compliance with the California Environmental Quality Act (CEQA), in which a Categorical Exemption is appropriate for approval. Caltrans has prepared a joint CEQA/NEPA environmental clearance (CE/CE) to present the results of all studies, including this Section 4(f) *de minimis* determination. A public notice was posted at the project site from April 13th through May 13th to inform the public

of the project and the proposed de minimum finding. A total of 8 notices were placed near the bike path and project area. Following public notice postings of the *de minimis* determination, the City of Long Beach Department of Public Works did not have further comment, therefore providing a concurrence of the proposed temporary occupancies on the San Gabriel River bike path. Concurrence from official with jurisdiction (City of Long Beach) was received.

VII. City of Long Beach Department of Public Works Concurrence E-Mail

The official with jurisdiction, the City of Long Beach, was provided the Section 4(f) De Minimis Memorandum for review and comment on May 27, 2022. A period of 60 days for receipt of comments was provided. No comments were received as of July 27, 2022, therefore indicating a lack of objection and the project action will proceed.

Appendix B. Title VI Policy Statement

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.” Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a nondiscriminatory manner. Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age. For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Appendix C. Summary of Relocation Benefits

California Department of Transportation Relocation Assistance Program

RELOCATION ASSISTANCE ADVISORY SERVICES

DECLARATION OF POLICY

"The purpose of this title is to establish a ***uniform policy for fair and equitable treatment*** of persons displaced as a result of federal and federally assisted programs in order that such persons ***shall not suffer disproportionate injuries*** as a result of programs designed for the benefit of the public as a whole."

The Fifth Amendment to the U.S. Constitution states, "No Person shall…be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation." The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 Code of Federal Regulations (CFR) Part 24. Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and financial benefits, as discussed below.

FAIR HOUSING

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This act, and as amended, makes discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and are within their financial means. This policy, however, does not require the Department to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the initiation of negotiations (usually the first written offer to purchase), owner-occupants are given a detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted soon after the initiation of negotiations and also are given a detailed explanation of the Caltrans Relocation Assistance Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Department relocation advisor.

RELOCATION ASSISTANCE ADVISORY SERVICES

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, the Department will provide relocation advisory assistance to any person, business, farm, or nonprofit organization displaced as a result of the acquisition of real

property for public use, so long as they are legally present in the United States. The Department will assist eligible displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are "decent, safe, and sanitary." Nonresidential displacees will receive information on comparable properties for lease or purchase (for business, farm, and nonprofit organization relocation services, see below).

Residential replacement dwellings will be in a location generally not less desirable than the displacement neighborhood at prices or rents within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning federal and state assisted housing programs and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written notice. Residential occupants eligible for relocation payment(s) will not be required to move unless at least one comparable "decent, safe, and sanitary" replacement dwelling, available on the market, is offered to them by the Department.

RESIDENTIAL RELOCATION FINANCIAL BENEFITS

The Relocation Assistance Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Assistance Program can be summarized as follows:

Moving Costs
Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule. Lawful occupants who move into the displacement property after the initiation of negotiations must wait until the Department obtains control of the property in order to be eligible for relocation payments.

Purchase Differential
In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 90 days or more prior to the date of the initiation of negotiations (usually the first written offer to purchase the property), may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling

is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate.

Rent Differential
Tenants and certain owner-occupants (based on length of ownership) who have occupied the property to be acquired by the Department prior to the date of the initiation of negotiations may qualify to receive a rent differential payment. This payment is made when the Department determines that the cost to rent a comparable "decent, safe, and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the *Down Payment* section below. To receive any relocation benefits, the displaced person must buy or rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date the Department takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Down Payment
The down payment option has been designed to aid owner-occupants of less than 90 days and tenants in legal occupancy prior to the Department's initiation of negotiations. The one-year eligibility period in which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.

Last Resort Housing
Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on Federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances.

After the initiation of negotiations, the Department will within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Number of people to be displaced.
- Specific arrangements needed to accommodate any family member(s) with special needs.
- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family.
- Preferences in area of relocation.
- Location of employment or school.

NONRESIDENTIAL RELOCATION ASSISTANCE

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms, and nonprofit organizations are: searching and moving expenses, and possibly reestablishment expenses; or

a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payment types can be summarized as follows:

Moving Expenses
Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property, including: dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property. Items identified as real property may not be moved under the Relocation Assistance Program. If the displacee buys an Item Pertaining to the Realty back at salvage value, the cost to move that item is borne by the displacee.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.
  Expenses related to searching for a new business site, up to $2,500, for reasonable expenses actually incurred.

Reestablishment Expenses
Reestablishment expenses related to the operation of the business at the new location, up to $25,000 for reasonable expenses actually incurred.

Fixed In Lieu Payment
A fixed payment in lieu of moving, searching, and reestablishment payments may be available to businesses that meet certain eligibility requirements. This payment is an amount equal to half the average annual net earnings for the last two taxable years prior to the relocation and may not be less than $1,000 nor more than $40,000.

ADDITIONAL INFORMATION

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, or any other law, ***except*** for any federal law providing local “Section 8” Housing Programs.

Any person, business, farm or nonprofit organization that has been refused a relocation payment by the Department relocation advisor or believes that the payment(s) offered by the agency are inadequate may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

California law allows for the payment for lost goodwill that arises from the displacement for a public project. A list of ineligible expenses can be obtained from the Department’s Division of Right of Way and Land Surveys. California’s law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency.

Appendix D. Glossary of Technical Terms

Active Fault – The Alquist-Priolo Earthquake Fault Zoning Act defines an active fault as one that has evidence of rupture within the last 11,000 years (Holocene time). The Alquist-Priolo Zone only applies to surface traces of faults that the State Geologist considers "active" and the Zone itself does not define a potentially active fault. However, a potentially active fault is commonly considered to be a fault that shows evidence of movement within Quaternary time (within the last 1.8 million years) but not within recent (Holocene) time.

Acquisition – An asset or object bought or obtained, typically by a library or museum.

Administrative Record – The compilation of notices, background reports, and environmental review documents that provide a record of the environmental review, public involvement, and decision-making processes required by CEQA related to a project.

Adverse Impact – A term used to describe unfavorable, harmful, or detrimental environmental changes. Adverse impacts may be significant or not significant.

Adverse impact – An unwanted and unanticipated result of taking a particular action.

Advisory Council on Historic Preservation (ACHP) – Independent federal agency responsible for implementing the Section 106 review process.

Air Pollution/Pollutants – Substances that are foreign to the atmosphere or are present in the natural atmosphere to the extent that they may result in adverse effects on humans, animals, vegetation, and materials. Common air pollutants are ozone, nitrogen dioxide, particular matter, and carbon monoxide. Air pollution is defined in the California Health and Safety Code as any discharge release, or other propagation into the atmosphere and includes, but is not limited to, smoke, charred paper, dust soot, grime, carbon, fumes, gases, odors, particulate matter, acids, or any combination thereof.

Air Pollution Control District (APCD) – A local agency with authority to regulate stationary, indirect, and area sources of air pollution (such as refineries, manufacturing facilities, and power plants) within a given country, and governed by a District Air Pollution Control Board composed of elected county supervisors.

Air Quality Management District (AQMD) – A group of countries or portions of countries, or an individual county specified in law with authority to regulate stationary, indirect, and area sources of air pollution within the region and governed by a regional air pollution control board comprised mostly of elected officials from within the region.

Air Quality Model – An algorithmic relationship between pollutant emissions and pollutant concentrations used in the prediction of a project's pollutant impact.

Air Quality Standards – Standards promulgated by state or federal pollution control districts. The specified average concentration of an air pollutant in ambient air during a specified time period at or above which undesirable effects may be produced. The prescribed level of a pollutant in the outside air that should not be exceeded during a specific time period to protect public health. Established by both federal and state governments.
Air Toxics – A generic term referring to a harmful chemical or group of chemicals in the air. Any

air pollutant for which a national ambient air quality standard (NAAQS) does not exist (i.e., excluding ozone, carbon monoxide, PM_{10}, sulfur dioxide, nitrogen dioxide) that may reasonably be anticipated to cause cancer, developmental effects, reproductive dysfunctions, neurological disorders, heritable gene mutations, or other serious or irreversible chronic or acute health effects in humans. Substances that are especially harmful to health, such as those considered under U.S. EPA's hazardous air pollutant program or California's AB 1807 and/or AB 2588 air toxics programs, are considered to be air toxics. Technically, any compound that is in the air and has the potential to produce adverse health effects is an air toxic.

Alluvial fan deposits – A fan-shaped area of soil deposited where a mountain stream first enters a valley or plain.

Alluvial Soils – Soil developing from recent alluvium; typically found in floodplains.

Alquist-Priolo Earthquake Fault Zoning (AP) Act – was passed into law following the destructive February 9, 1971 Mw 6.6 San Fernando earthquake. This Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis, by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep.

Alluvium – Material developed by running water.

Ambient Noise – The background noise associated with a given environment, usually a composite of sounds from many sources near and far. The ambient noise level constitutes the normal or existing level or environmental noise at a given location regardless of source.

Americans with Disabilities Act (ADA) – is a civil rights law that prohibits discrimination based on disability.

Amentities – a desirable or useful feature or facility of a building or place.

Archeological Site – The location of past focused human activities, defined in close proximity of continuous distribution of artifacts.

Area of Potential Effect (APE) – A term used in section 106 of the National Preservation Act to describe the area in which historic resources may be affected by a federal undertaking.

Best Management Practice (BMP) – Any program, technology, process, operating method, measure, or device that controls, prevents, removes or reduces pollution.

Biological Diversity – The variety of life forms and its processes, including the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur.

Borrow – Soil brought from another area.

BSA – Biological Study Area.

Bulb-outs – a traffic calming measure, primarily used to extend the sidewalk, reducing the crossing distance and allowing pedestrians about to cross and approaching vehicle drivers to

see each other when vehicles parked in a parking lane would otherwise block visibility.

California Clean Air Act (CCAA) – A California law passed in 1998 that provides the basis for air quality planning and regulation independent of federal regulations, and that establishes new authority for attaining and maintaining California's air quality standards by the earliest practicable date. A major element of the CCAA is the requirement that local Air Pollution Control Districts in violation of the California Ambient Air Quality Standards must prepare attainment plans that identify air quality problems, causes, trends, and actions to be taken for attainment.

California Code of Regulations (CCR) – The regulations that implement California laws.

California Department of Fish and Wildlife (CDFW) – The state government agency responsible for regulating impacts to lakes and streambeds and upholding the California Endangered Species Act.

California Endangered Species Act (CESA) – Establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy.

California Environmental Quality Act (CEQA) – State legislation enacted in 1970 and subsequently amended. It requires public agencies to regulate activities which may affect the quality of the environment so that major consideration is given to preventing damage to the environment.

Capacity – The maximum amount of traffic that can be accommodated by a uniform segment of freeway under prevailing conditions.

Complete streets – A transportation policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation.

Corridor – A strip of land between two termini within traffic, topography, environment, and other characteristics are evaluated for transportation purposes.

Council on Environmental Quality (CEQ) – The National Environmental Policy Act (NEPA) established the CEQ within the Executive Office of the President to ensure that federal agencies meet their obligations under NEPA. CEQ oversees NEPA implementation, principally through issuing guidance and interpreting regulations that implement NEPA's procedural requirements.

Code of Federal Regulations (CFR) – The document that codifies all rules of the executive departments and agencies of the federal government. It is divided into 50 volumes, known as titles. Title 40 of the CFR (40 CFR) lists all the environmental regulations.

Cumulative Impact – Under NEPA, a cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (source: 40 CFR 1508.7)

Under CEQA, a cumulative impact refers to two or more individual affects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (source: CEQA Guidelines 15355).

dBA – A-weighted decibels are adjusted to approximate the way the average person hears sound.

Decibels (dB) – With respect to sound, decibels measure a scale from the threshold of human hearing, 0 decibels, upwards towards the threshold of pain, about 120-140 decibels. Because decibels are such a small measure, they are computed logarithmically and cannot be added arithmetically. An increase of 10 decibels is perceived by the human ear as a doubling of noise.

De Minimis – A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Drainage – The process by which atmospheric pollutants disseminate due to wind and vertical Stability.

Drainage Area – The portion of earth's surface from which precipitation or other runoff flows to a given location. With respect to a highway, this location may be a culvert, the farthest point of a channel, or an inlet to a roadway drainage system.

Dredge – Clean out the bed of (a harbor, river, or other area of water) by scooping out mud, weeds, and rubbish with a dredge.

Endangered – Plant or animal species that are in danger of extinction throughout all or a significant portion of its range.

Endangered Species Act – A federal law that protects threatened and/or endangered species from becoming extinct.

Environment – The physical conditions which exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved shall be the area in which significant effects would occur either directly or indirectly as a result of the project. The "environment" includes both natural and man-made conditions (source: CEQA Guidelines 15360).

Erosion – The wearing away of the land surface by running water, wind, ice, or other geological agents.

Excavation – remove earth carefully and systematically from a site in order to find buried remains.

Expansive Soils – Soils that swell when they absorb water and shrink as they dry.

Fault – A fracture in the earth's crust forming a boundary between rock masses that have shifted. An active fault is a fault that has moved recently and that is likely to again. An inactive fault is a fault that shows no evidence of movement in recent geologic time and no potential for movement in the relatively near future.

Feasible - Feasible 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 (source: CEQA Guidelines §15364).

Feature - A large, complex artifact or part of a site such as a hearth, cairn, house pit, rock alignment, or activity area.

Federal Clean Air Act (FCAA) - A federal law passed in 1970 and amended in 1974, 1977, and 1990 that forms the basis for the national air pollution control effort. Basic elements of the act include national ambient air quality standards for major air pollutants, mobile and stationary control measures, air toxics standards, acid rain control measures, and enforcement provisions.

Federal Emergency Management Agency (FEMA) - The federal agency under which the National Flood Insurance Program is administered.

Federal Highway Administration (FHWA) – The Federal Agency within the United States Department of Transportation (USDOT) responsible for administering the Federal-Aid Highway Program and the Motor Carrier Safety Program.

Federal State Transportation Improvement Program (FSTIP) – A multiyear statewide, financially constrained, intermodal program of projects that is consistent with the statewide transportation plan (CTP) and regional transportation plans (RTP's). The FSTIP is developed by the California Department of Transportation and incorporates all of the MPO's and RTPA's FTIP's by reference. Caltrans then submits the FSTIP to FHWA.

Federal Transportation Improvement Program (FTIP) – A constrained 4-year prioritized list of all transportation projects that are proposed for federal and local funding. The FTIP is developed and adopted by the MPO/RTPA and is updated every 2 years. It is consistent with the RTP and it is required as a prerequisite for federal funding.

Federal Endangered Species Act (FESA) - he law requires federal agencies, in consultation with the U.S. Fish and Wildlife Service and/or the NOAA Fisheries Service, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a "taking" of any listed species of endangered fish or wildlife. Likewise, import, export, interstate, and foreign commerce of listed species are all generally prohibited.

Fine Particulate Matter (PM_{10}) - PM10 causes a greater health risk than larger-sized particles, since these fine particles can be inhaled more easily and irritate the lungs by themselves and in combination with gases.

Floodplain – Any land area subject to inundation by floodwaters from any source.

Floodway – The channel of a river or other watercourse, plus any adjacent floodplain areas, which is designated a floodway by a public agency, that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without cumulatively increasing the water surface elevation more than one foot above the BFE (Base Flood Elevation).

Fossil – Any remains, trace, or imprint of a plant or animal that has not been preserved in the earth's crust since some past geologic time (Bates and Jackson 1980:243).

Fossil localities – The position or site of fossil locations.

Geologic Review – The analysis of geologic hazards, including all potential seismic hazards, surface ruptures, liquefaction, landslides, mudslides, and the potential for erosion and sedimentation.

Geological – Relating to the form or surface features of the earth.

Greenhouse Gases (GHG's) – Gases that trap heat in the atmosphere.

Groundwater – The term usually refers to the "saturated" zone in the ground where all the pore space between the soil particles is occupied by water. Water under the earth's surface, often confined to aquifers capable of supplying wells and springs. Does not include water that is being produced with oil in the production of oil and gas or in a bona fide mining operation.

Groundwater table – The upper surface of the zone of saturation (all pores of subsoil filled with water), except where the surface if formed by an impermeable body.

Grubbed – Vegetation that has been removed by mechanical or manual methods.

Habitat – Place where a plant or animal lives.

Hazardous Material – A substance or combination of substances that because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious, irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, disposed of or otherwise managed.

Hazardous Waste – A waste or combination of wastes that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause or significantly contribute to an increase in mortality or an increase in serious irreversible illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. A hazardous material than cannot be reused or recycled. A hazardous waste possesses at least one of four characteristics–ignitability, corrosivity, reactivity, or toxicity–or appears on special EPA or state lists. Hazardous waste is regulated under the federal Resource Conservation and Recovery Act and the California Health and Safety Code.

High Occupancy Vehicle (HOV) Lanes – A lane of freeway reserved for the use of vehicles with set minimum number of occupants. Buses, taxis, carpools (which satisfy the occupancy minimum), and motorcycles generally may use HOV lanes.

Holocene – The second epoch of the Quaternary Period characterized by man and modern animals.

Hydrology – The study of the water cycle.

Impact – The effect, influence, or imprint of an activity or the environment. Impacts include: direct or primary effects that are caused by the project and occur at the same time and place; indirect or secondary effects that are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate and related effects on air and water and other natural systems, including ecosystems.

Initial Study (IS) – Under CEQA, the Initial Study is prepared to determine whether there may be significant environmental effects resulting from a project. The Initial Study is attached to the Negative Declaration (ND) or Mitigated Negative Declaration (MND). It can become the basis of an Environmental Impact Report (EIR) if it concludes that the project may cause significant environmental effects that cannot be mitigated below the level of significance.

Infiltration – The introduction of underground water, such as groundwater, into wastewater collection system. Infiltration results in increased wastewater flow levels.

Intersection Capacity Utilization Method (ICU) – A method of analyzing intersection level of service by calculating a volume-to-capacity (V/C) ratio for each governing "critical" movement during a traffic signal phase. The V/C ratio for each phase is summed with the others at the intersection to produce an overall V/C ratio for the intersection as a whole. The ICU is usually expressed as a percent. The percent represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The V/C ratio represents the percent of intersection capacity used. For example, a V/C ratio of 0.85 indicates that 85 percent of capacity is being used.

Landslide – Down slope movement of soil and/or rock, that typically occurs during an earthquake or following heavy rainfall.

Lead Agency (CEQA) – “Lead Agency” means the public agency which has primary responsibility for carrying out or approving a project which may have a significant effect on the environment and preparing the environmental document.

Lead Agency (NEPA) – The agency or agencies preparing or having taken primary responsibility for preparing the environmental impact statement.

Level of Service (LOS) – A measure describing operational conditions within a traffic stream. It measures such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The six defined levels of services use letter designations from A to F, with Level of Service A representing the best operating conditions and Level of Service F representing the worst. Each Level of Service represents a range of operating conditions.
Level of Service A: Indicates a relatively free flow of traffic, with little or no limitation on vehicle movement or speed.

Level of Service B: Describes a steady flow of traffic, with only slight delays in vehicle movement and speed. All queues clear in a single signal cycle.
Level of Service C: Denotes a reasonably steady, high-volume flow of traffic, with some limitations on movement and speed, and occasional backups on critical approaches.
Level of Service D: Designates the level where traffic nears an unstable flow. Intersections still function, but short queues develop and cars may have to wait through one cycle during short peaks.
Level of Service E: Represents traffic characterized by slow movement and frequent (although momentary) stoppages. This type of congestion is considered severe, but is not uncommon at peak traffic hours, with frequent stopping, long-standing queues, and blocked intersections.
Level of Service F: Describes unsatisfactory stop-and-go traffic characterized by "traffic jams" and stoppages of long duration. Vehicles at signalized intersections usually have to wait through one or more signal changes, and "upstream" intersections may be blocked by the long queues.

Liquefaction – The loss in the shearing resistance of a cohesion less soil, caused by an earthquake wave. The soil is turned into a fluid mass.

Lithic – Of and pertaining to a stone (obsidian, chert, basalt, etc.), as "lithic artifacts."

Local Agency – Local agency means any public agency other than a state agency, board, or commission. Local agency includes but is not limited to cities, counties, charter cities and counties, districts, school districts, special districts, redevelopment agencies, local agency formation commissions, and any board, commission, or organizational subdivision of a local agency when so designated by order or resolution of the governing legislative body of the local agency (source: CEQA Guidelines §15368).

Median – The portion of a divided highway separating the traveled ways in opposite directions. A median is often installed to prohibit unsafe turning movements. It can also be used to beautify a streetscape.

Memorandum of Understanding (MOU) – A common form of formal agreement between government agencies.

Mitigated Negative Declaration (MND) – The CEQA document that is used when the Initial Study concludes that a project's potential significant effect on the environment can be reduced below the level of significance with the incorporation of mitigation measures.

Mitigation – Mitigation refers to (1) avoiding the impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (4) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or, (5) compensating for the impact by replacing or providing substitute resources or environments (source: CEQA Guidelines §15370). Mitigation, under NEPA, includes (a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by

replacing or providing substitute resources or environments. (source: 40 CFR 1508.20)

Mitigation Measure – Action taken to reduce or eliminate environmental impacts. Mitigation includes: avoiding the impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments.

Mitigation Monitoring Program – When a lead agency adopts a mitigated negative declaration or an EIR, it must adopt a program of monitoring or reporting which will ensure that mitigation measures are implemented. (See CEQA Statute Section 21081.6(a) and CEQA Guidelines Sections 15091(d) and 15097).

Multimodal – Pertaining to more than one method of traveling.

National Ambient Air Quality Standards (NAAQS) - Standards set by the U.S. Environmental Protection Agency for the maximum levels of air pollutants that can exist in the ambient air without unacceptable effects on human health or public welfare. There are two types of NAAQS. Primary standards set limits to protect public health and secondary standards set limits to protect public welfare.

National Environmental Policy Act (NEPA) – Enacted in 1969, NEPA requires all federal agencies to consider environmental factors through a systematic interdisciplinary approach before committing to a course of action. The NEPA process is an overall framework for the environmental evaluation of federal actions.

National Pollutant Discharge Elimination System (NPDES) Permits – Under the NPDES Program (Federal Clean Water Act), any person responsible for the discharge of a pollutant or pollutants into any waters of the United States from any point source must apply for and obtain a permit. According to Section 402 of the Clean Water Act, the Environmental Protection Agency is the issuing authority for all NPDES permits in a state until such time as the state elects to take over the administration and obtains EPA approval of its programs. (The State Water Resources Control Board (SWRCB) has this authority in California.) Dischargers are required to disclose the volume and nature of their discharges. Further, the EPA or equivalent State Agency has the authority to specify limitations to be imposed on discharges and to require monitoring and reporting as to compliance or non-compliance.

National Register of Historic Places – The official inventory established by the National Historic Preservation Act of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering and culture.

Negative Declaration (ND) – The CEQA document that is used when the Initial Study concludes that a project will have no significant impact on the environment.

Paleontological Site – Any area or location containing a trace or impression, or the remains, of plants or animals from past ages.

Paleontological Species – A morphologic species based on fossil specimens. It may include

specimens that would be considered specifically distinct if living individuals could be observed (Bates and Jackson 1980:451).

Paleontological Resource – A locality containing vertebrate, invertebrate, or plant fossils (i.e., fossil location, fossil bearing formation, or a formation with the potential to bear fossils).

Paleontology – The study of life in past geologic time based on fossil plants and animals and including phylogeny, their relationships to existing plants, animals, and environments, and chronology of the earth's history (Bates and Jackson 1980:451).

Phase I – For cultural resources, generally consists of a records search, a pedestrian field survey, and a written report.

Phase II – Usually will include test excavation pits. The goals are to determine the site's boundaries, an assessment of the site's integrity, and evaluation of the site's importance or significance through a study of its features and artifacts.

Plans, Specifications, and Estimates (PS&E) – The bid documents, including general design, specifications, and estimate costs.

Pleistocene – The first epoch of the Quaternary Period characterized by the first indications of social life in man.

Pollutant – Any introduced gas, liquid, or solid that makes a resource unfit for its normal or usual purpose.

Pollution – The presence of matter or energy whose nature, location, or quantity produces undesired environmental effects.

Preservation – As used in historic preservation, the process of sustaining the form and extent of a structure essentially as it exists. Preservation aims at halting further deterioration and providing structural stability but does not contemplate significant rebuilding.

Preserve – An area in which beneficial uses in their present condition are protected; for example, a nature preserve or agricultural preserve. To keep safe from destruction or decay; to maintain or keep intact.

Project Lot Area – The total land area of a project after all required dedications or reservations for public improvements, including, but not limited to, streets, parks, schools, flood control channels, etc.

Rare Species – In accordance with the CEQA Guidelines, a "Species" means a species or subspecies of animal or plant or a variety of plant. A species of animal or plant is: "Rare" when either: (a) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or (b) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the Federal Endangered Species Act. A species of animal or plant shall be presumed to be endangered, rare or threatened, as it is listed in: (1) Sections 670.2 or 670.5, Title 14, California; (2) Title 50, Code of Federal Regulations Section 17.11 or 17.12 pursuant to

the Federal Endangered Species Act as rare, threatened, or endangered. A species not included in any listing shall nevertheless be considered to be endangered, rare or threatened, if the species can be shown to meet specific criteria. This definition shall not include any species of the Class Insecta which is a pest whose protection under the provisions of CEQA would present an overwhelming and overriding risk to man as determined by: The Director of Food and Agriculture with regard to economic pests; or The Director of Health Services with regard to health risks (source: CEQA Guidelines §15380).

Receptors – Term used in air quality and noise studies that refers to houses or businesses that could be affected by a project.

Regulatory Agency – An agency that has jurisdiction by law.

Right-Of-Way – A general term denoting land, property, or interest therein, usually in a strip acquired for or devoted to transportation purposes.

Risk Assessment – The qualitative and quantitative evaluation of the risk posed to human health and/or the environment by the actual or potential presence and/or use of specific pollutions.

Ruderal – Disturbed area with a prevalence of introduced weedy species. Ruderal habitats are associated with unpaved highway shoulders and weedy areas around and between dwellings and other structures.

Runoff – That portion of rain or snow that does not percolate into the ground and is discharged into streams instead.

Scoping – NEPA defines scoping as an early and open process for determining the scope or issues to be addressed and for identifying the significant issues related to a proposed action (40 CFR 1501.7). Under CEQA, scoping is designed to examine a proposed project early in the Environmental Impact Report (EIR) analysis/review process and is intended to identify the range of issues pertinent to the proposed project and feasible alternatives or mitigation measures to avoid potentially significant environmental effects.

Scour – Erosion caused by moving water.

Section 106 – Provision in the National Historic Preservation Act that requires federal agencies to consider effects of proposed undertakings on properties listed or eligible for listing in the National Register of Historic Places.

Sediment – Organic or inorganic material that is carried by or is suspended in water that settles out to from deposits in the storm drain system or receiving waters.

Sedimentation – Process by which material suspended in water is deposited in a body of water.

Seiche – A free standing-wave oscillation of the surface of water in an enclosed or semi enclosed basin (such as a lake, bay, or harbor). It is generally caused by local changes in atmospheric pressure, aided by winds, tidal currents and small earthquakes.

Seismic – Caused by or subject to earthquakes or earth vibrations.

Significance (CEQA) – CEQA defines a "significant effect on the environment" as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change is significant" (15382). CEQA requires that the lead agency identify each "significant effect on the environment" resulting from the project and avoid or mitigate it. The CEQA Guidelines include mandatory findings of significance for certain effects, thus requiring the preparation of an Environmental Impact Report (EIR).

Significance (NEPA) – Under NEPA, an Environmental Impact Statement (EIS) is required when the proposed federal action has the potential to "significantly affect the quality of the human environment." To determine that potential, one must consider both the context in which the action takes place and the intensity of its effect. Section 1508.27 of the Council on Environmental Quality (CEQ) regulations defines the term "significantly" as:
Significantly as used in NEPA requires considerations of both context and intensity:
A. Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short-and long-term effects are relevant.
B. Intensity. This refers to the severity of impact. Responsible officials must bear in mind more than one agency may make decisions about partial aspects of major action. The following should be considered in evaluating intensity:
1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
2. The degree to which the proposed action affects public health or safety.
3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial
5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
7. Whether the action is related to other actions with individually insignificant but cumulatively impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. [43 FR 56003, Nov. 29, 1978; 44 FR 874, Jan. 3, 1979].

Slope – Land gradient described as the vertical rise divided by the horizontal run and expressed in percent.

Special-Status Species – Plant or animal species that are either (1) federally listed, proposed for or a candidate for listing as threatened or endangered; (2) bird species protected under the federal Migratory Bird Treaty Act; (3) protected under state endangered species laws and regulations, plant protection laws and regulations, Fish and Game codes, or species of special concern listings and policies; or (4) recognized by national, state, or local environmental organizations (e.g., California Native Plant Society).

Stratum – A layer of sedimentary rock; plural is strata.

Stratigraphy – The study of rock layers, especially their formation, distribution, composition, and age.

Storm Runoff – Surplus surface water generated by rainfall that does not seep into the earth but flows overland to flowing or stagnant bodies of water.

Stratum – A layer of material deposited by cultural or geological processes.

Subsidence – A localized mass movement that involves the gradual downward settling or sinking of the earth's surface.

Sustainability – Community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.

Topography – The physical shape of the ground surface. Configuration of a surface, including its relief and all position of natural and man-made features.

Threatened – A species that is likely to become endangered in the foreseeable future in the absence of special protection.

Threatened Species – A species in danger of becoming endangered within the foreseeable future throughout all or a significant portion of its range. The species is determined to be threatened by the U.S. Fish and Wildlife Service in accordance with the federal Endangered Species Act of 1973, resulting in the prohibition of activities that harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct without a incidental take permit.
Under CEQA, a species of animal or plant is endangered when its survival and reproduction in the wild are in immediate jeopardy form one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, disease, or other factors. Although when not presently threatened with extinction, the species exists in such small numbers that it may become endangered if its environment worsens. A species of animal or plant shall be presumed

to be rare or endangered as it is listed in: Sections 670.2 or 670.5, Title 14, California Code of Regulations; or Title 50, Code of Federal Regulations Sections 17.11 or 17.12 pursuant to the Federal Endangered Species Act as rare, threatened, or endangered.

Traffic Model – A mathematical representation of traffic movement within an area or region based on observed relationships between the kind and intensity of development in specific areas. Many traffic models operate on the theory that trips are produced by persons living in residential areas and are attracted by various non-residential land uses.

Vehicle Miles Traveled (VMT) – The number of miles traveled by vehicles for a specified time period.

Watershed – The area of land that drains into a specific waterbody.

Zone – A specifically delineated area or district in a municipality within which regulations and requirements uniformly govern the use, placement, spacing and size of land and buildings.

Zoning – The division of a municipality by legislative regulations into areas or zones for the purpose of regulating land use, types of buildings, required yards and setbacks, parking, and other prerequisites to development. Zones are generally shown on a map and the text of the zoning ordinance specifies requirements for each zoning category. A program that implements

Appendix E. Avoidance, Minimization and/or Mitigation Summary

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During project design, avoidance, minimization, and /or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
Human Environment									
Land Use									
Coastal Zone									
Avoidance and Minimization Measures									
CZ-1 A Coastal Development Permit (CDP) must be obtained from the California Coastal Commission prior to the start of construction. California Coastal Commission will need to approve the final project plans and all work activities.	Environmental Planning, Generalist	PS&E/Before RTL							
Parks and Recreational Facilities									
Avoidance and Minimization Measures									
PR-1 As part of the process for preparing a Section 4(f) De Minimus, Caltrans will post public notices in the Project area to notify the public about the Project and potential temporary impacts to the San Gabriel River Trail. Once the notice has been posted for 30 days and any comments from the public have been addressed, a Section 4(f) De Minimus will be finalized and shared with the official with jurisdiction (City of Long Beach).	Environmental Planning, Generalist	PAED, 0 Phase							
Community Impacts									
Relocations and Property Acquistions									
Avoidance and Minimization Measures									
REL-1 Prior to construction, Caltrans will obtain all required right-of-way. Owners of property to be acquired shall be compensated for the fair market value of the property as well as damages, if any, to the remaining portions of their properties in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act. All eligible displaces will be compensated for moving expenses. All benefits and services will be provided equitably to all relocates without regard to race, color, religion, age, national origin, or disability as specified under Title VI of the Civil Rights Act of 1964.	City of Long Beach, Caltrans Right-of-Way	PS&E/Before RTL							
Environmental Justice									
Avoidance and Minimization Measures									
EJ-1 Public Outreach/Notices of Project will be published in Spanish Language Newspaper such as "La Opinion".	City of Long Beach, Caltrans Environmental Planning	PS&E/Before RTL							
Utilities/Emergency Services									
Project Features									
PF-UES-1 Utility relocation plans will be prepared in consultation with the affected utility providers/owners for those utilities that will need to be relocated, removed, or protected in-place.	Design Engineer	PS&E/Before RTL							
PF-UES-2 All temporary ramp and arterial roadway closures and detour plans will be coordinated with law enforcement, fire protection, and emergency medical service providers.	Resident Engineer	Pre-Construction							
Avoidance and Minimzation Measures									

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
UES-1 The Office of the State Fire Marshal (OSFM) currently regulates the safety of intrastate hazardous liquid pipeline in California. OSFM Pipeline Safety Division staff inspect pipeline operators to ensure compliance with federal and state pipeline safety laws and regulations. Hazardous liquid pipelines can carry commodities such as crude oil, gasoline, propane, and other types of hydrocarbons. OSFM must respond to intrastate pipeline accidents, investigate significant intrastate pipeline releases, inspect pipeline construction and relocation projects, respond to train derailments near pipelines, and meet with state and local governments to discuss various pipeline safety issues.	Resident Engineer, General Contractor	Pre-Construction /Construction							
UES-2 Coastal Best Available Technology (CBAT, formerly known as AB-864) must be followed. AB 864 required that any new or replacement pipeline near environmentally and ecologically sensitive areas (EESA) in the coastal zone to use best available technologies to reduce the amount of oil released in an oil spill to protect state waters and wildlife. Additionally, it required that an operator of an existing pipeline near these sensitive areas submit a plan to retrofit the pipeline to the OSFM. Finally, OSFM was required to develop regulations pursuant to these requirements by July 1, 2017. California Code of Regulations, Title 19 Public Safety, Division 1 State Fire Marshall, Chapter 14 Hazardous Liquid Pipeline Safety, Article 7, Sections 2107 and 2109 will be adhered to. **https://osfm.fire.ca.gov/media/11548/_01_text2ndwdatescertain-final-clean.pdf**	Resident Engineer, General Contractor	Pre-Construction/ Construction							
UES-3 The California State Oil Spill Contingency Plan is an independent document regarding discharges of oil to all marine or inland or surface waterways of California, and for oil spills to land. All state and local agencies must carry out spill response activities consistent with this Plan **(https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=172767&inline)** and other applicable federal, state, or local spill response plans. The statutes OPA 90 and SB 2040 were enacted in consequence of the catastrophic oil spills of 1989 and required contingency planning by both State and Federal Governments. The U.S. Coast Guard (USCG) and California Department of Fish and Wildlife (CDFW) Office of Spill Prevention and Response (OSPR) agreed to joint preparation of six contingency plans through co-chairing the three Port Area Committees (ACPs) for Contingency Planning: USCG Port Areas for San Francisco, Los Angeles/Long Beach, and San Diego. The Area Committee planning process is a proactive effort to deal with potential oil releases. It is open to all stakeholders and has involved representatives from over 50 agencies, including federal, state, local, industry and environmental participants. The three Port ACPs provide guidance for the first 24 hours of response, and each of the six coastal planning areas have provided detailed evaluation and recommendations for protection of regional shoreline resources. **https://wildlife.ca.gov/OSPR/Contingency**	Resident Engineer, General Contractor	Pre-Construction/ Construction							
Traffic and Transportation/Pedestrian and Bicycle Facilities									
Project Features									
PF-T-1 A Final Transportation Management Plan (TMP) shall be developed in detail during final design.	Project Engineer, Design	PS&E/Before RTL							
Avoidance and Minimization Measures									

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
TT-1 All affected transportation infrastructure will be replaced with equivalent transportation infrastructure of the same capacity as that currently present.	Project Engineer, Resident Engineer	Construction							
TT-2 The California Department of Transportation (Caltrans) and its construction contractors will seek to minimize disruption of service as much as possible through the use of a Transportation Management Plan that will provide detailed access and detour strategies to minimize delays for the public and emergency vehicles.	Resident Engineer, General Contractor	Construction							
TT-3 Caltrans will work with the City of Long Beach and the City of Seal Beach to ensure public access and the availability of emergency and public services during the construction period.	Resident Engineer, General Contractor	Construction							
Visuals/Aesthetics									
Avoidance and Minimization Measures									
VIS-1 A bridge railing design approved by the California Coastal Commission will be used to improve the visibility.	Design, Project Engineer, Environmental Planning	PS&E/Before RTL							
Cultural Resources									
Project Features									
PF-CUL-1 Caltrans has developed a Post-Review Discovery and Monitoring Plan (PRDMP) with delineation of the entirety of the Project area as an archaeological monitoring area (AMA). Native American and archaeological monitoring of the AMA will be implemented. If unanticipated discoveries occur during Project construction, the procedures and protocols in the PRDMP will be followed as well as PF-CUL-2 and PF-CUL-3.	Cultural Resources Staff, Resident Engineer, General Contractor	Construction							
PF-CUL-2 If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist, in coordination with the Native American monitor, can assess the nature and significance of the find.	Cultural Resources Staff, Resident Engineer, General Contractor	Construction							
PF-CUL-2 If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the Caltrans District 7 Environmental Branch Chief for Cultural Resources and the Native American Coordinator, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.	Cultural Resources Staff, Resident Engineer, General Contractor	Construction							
Physical Environment									
Hydrology and Floodplain									
Avoidance and Minimization Measures									

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
HF-1 Since the Project is located within a FEMA floodplain and a rise in the water surface elevation is being shown as a result of the Project, a Conditional Letter of Map Revision and later a Letter of Map Revision would be required to be obtained through FEMA for changes to the floodplain due to the Project.	Project Manager, Resident Engineer, General Contractor, Design	Pre-Construction							
Water Quality and Storm Water Runoff									
Project Features									
PF-WQ-1 The proposed Project will comply with the provisions of the Caltrans National Pollutant Discharge Elimination Systems (NPDES) Statewide Storm Water Permit (Order No. 2012-0011-DWQ, as amended by Order WQ 2014-0006-EXEC, Order WQ 2014-0077-DWQ, and Order WQ 2015-0036-EXEC, NPDES No. CAS000003) and the NPDES General Permit for Storm Water Discharges of Stormwater Runoff Associated with Construction Activities (Order No. 2009-0009-DWQ, as amended by 2012-0006DWQ), and any subsequent permits in effect at the time of construction.	Resident Engineer, General Contractor	Pre-Construction/ Construction							
PF-WQ-2 A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential to impact water quality. It shall be prepared per the requirements stated in the NPDES General Permit for Storm Water Discharges of Stormwater Runoff Associated with Construction Activities and any subsequent permit in effect at the time of construction. The SWPPP shall identify the sources of pollutants that may affect the quality of storm water and include the construction site BMPs to control pollutants such as sediment control, catch basin inlet protection, construction materials management and non-stormwater BMPs. All construction site BMPs shall follow the latest editions of the Caltrans Project Planning and Design Guide (PPDG) (2019) and Caltrans Construction Manual (2020). These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-stormwater BMPs.	Resident Engineer, General Contractor	Pre-Construction/ Construction							
PF-WQ-3 Caltrans-approved Design Pollution Prevention Best Management Practices (BMPS) shall be implemented to the maximum extent practicable (MEP), consistent with the requirements of the Caltrans permit.	Resident Engineer, General Contractor	Pre-Construction/ Construction							
PF-WQ-4 Caltrans-approved Treatment BMPs shall be implemented to the MEP, consistent with the requirements of the Caltrans Permit.	Resident Engineer, General Contractor	Pre-Construction/ Construction							
Avoidance and Minimization Measures									
WQ-1 Water Pollution Control Program (WPCP) will be used for this Project since the Disturbed Soil Area (DSA) is less than 1 acre. Project risk levels and erosivity calculations are not required.	Resident Engineer, General Contractor	Pre-Construction/ Construction							

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
WQ-2 The Contractor shall use all appropriate and necessary containment measures for work over waterways to ensure that no construction materials or debris from bridge work enter any waterways. In addition, any contingencies shall be used related to accidental gas or oil releases, as dictacted by approved utility relocation plans. Contractor shall use natural oils/lubricants and biodegradable hydraulic fluid when feasible.	Resident Engineer, General Contractor	Pre-Construction/ Construction							
WQ-3 The proposed Project area includes activities which will result in impacts to "Waters of the United States" and "Waters of the State"; therefore, a Section 404 of the Clean Water Act Permit will be required from the U.S. Army Corps of Engineers, a Section 401 of the Clean Water Act Permit will be required from the California Regional Water Quality Control Board, and a 1602 Streambed Alteration Agreement will be required from the California Department of Fish and Wildlife prior to commencement of construction. The Project shall adhere to any conditions required by these permits.	Resident Engineer, General Contractor, Project Biologist	Pre-Construction							
WQ-4 Construction site BMPs will be deployed during construction activities to reduce stormwater discharges during construction, and these must be incorporated into the Project specifications. Prior to the start of construction, all drain inlets must be protected with BMPs to prevent construction materials and debris, including methacrylate resin and sandblasting residue, from entering drainages. Temporary Construction BMPs will be required such as wind erosion control, sediment tracking control, street sweeping and vacuuming, stabilized construction roadway, spill prevention control, solid waste management, hazardous waste management, sanitary/septic waste management, material delivery and storage, material use, vehicle and equipment cleaning, vehicle and equipment fueling, and vehicle maintenance.	Resident Engineer, General Contractor	Pre-Construction/ Construction							
WQ-5 Temporary construction staging areas and access roads will be used to minimize impacts to USACE, RWCQB, and CDFW jurisdictional waters to the maximum extent feasible and are expected to be restored to pre-project conditions.	Resident Engineer, General Contractor	Pre-Construction/ Construction							
Geology/Soils/Seismic/Topography									
Project Features									
PF-GEO-1 Revegetation of graded slopes should be performed to minimize erosion, and runoff should be diverted from each slope face using earthen berms and/or concrete swales at the top of each slope.	Resident Engineer, General Contractor	Construction/Post-Construction							
Paleontology									
Avoidance and Minimization Measures									

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
PAL-1 If unanticipated fossils are discovered during construction, all work must halt within a 60-foot radius of the find until it can be evaluated by a qualified paleontologist. Notify the Division of Environmental Planning and Engineer. Do not move paleontological resources or take them from the job site. Work may resume immediately outside that radius.	Resident Engineer, General Contractor, Environmental Planning	Construction							
Hazardous Waste/Materials									
Project Features									
PF-HAZ-1 Site investigations performed at the properties for the Project will be completed during the PS&E phase to determine whether more extensive subsurface investigation will be needed.	Hazardous Waste, Resident Engineer, Design	PS&E/Before RTL							
PF-HAZ-2 If hazardous materials, contamination, or sources are suspected or identified during Project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the Caltrans Construction Manual (July 2019). Adequate protection for construction workers will be provided with the implementation of a Health and Safety Plan and Soil Management Plan.	Resident Engineer, General Contractor, Hazardous Waste	Construction							
PF-HAZ-3 If hazardous materials are discovered, the construction contractor will remove and properly dispose of any materials in accordance with the Caltrans Construction Manual (July 2019), Chapter 7, Section 7-107, Hazardous Waste and Contamination.	Resident Engineer, General Contractor, Hazardous Waste	Construction							
PF-HAZ-4 Lead Compliance Plan shall be prepared prior to the start of construction activities.	Resident Engineer, General Contractor, Hazardous Waste	Pre-Construction							
Avoidance and Minimzation Measures									
HAZ-1 Waste disposal permit for Caltrans General Contractor (GC) will be required. All waste to be disposed must be properly tested by the GC for various contaminants in accordance with the disposal permit requirements in construction. The GC will also be required to submit waste discharge summary report to Caltrans Engineer during construction. OEE will coordinate with project environmental planner to aid in acquiring necessary permits during the PS&E phase, and will provide appropriate specifications to be included in the project bid document.	Design, Project Engineer, Environmental Planning,	Pre-Construction/ Construction							
HAZ-2 Any soil generated at the unpaved area in the parcels shall be handled as California hazardous waste (non-RCRA) and the material shall be managed and disposed as hazardous waste at a permitted Class I disposal facility within the State of California.	Resident Engineer, General Contractor, Hazardous Waste	Construction							

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
HAZ-3 In the event the existing bridge railings will be disturbed/removed/replaced, an ACM and LCB survey will be required in compliance with AQMP/NESHAP notification requirements. OEE recommends a bridge paint and ACM survey to be performed during design phase (PS&E) to determine the appropriate handling procedure in conformance with State and Federal laws and regulations.	Resident Engineer, General Contractor, Hazardous Waste, Design	PS&E/Before RTL							
HAZ-4 All soil disturbed must remain in the immediate area of disturbance and not be transported elsewhere. Health and Safety precautions and dust control for hazardous waste must be implemented. It is important to notify the GC that lead is present and allow for preparation of task-specific Lead Compliance Plan (LCP) and lead awareness training as required by 8CCR, Section 1532.1, "Lead", Cal-OSHA Construction Safety Order, and Caltrans Standard Specifications.	Resident Engineer, General Contractor	Construction							
HAZ-5 The combined AC debris and existing traffic stripe/pavement marking paint residue potentially may generate a hazardous waste condition if lead and total chromium concentrations exceed the California Hazardous Waste regulated threshold levels. OEE recommends that cost estimate for removal of traffic stripe and/or pavement marking shall be provided. OEE staff will evaluate the lead content based on the grinded residue containing both concrete and/or AC with yellow lead based paint and/or thermoplastic paint when the construction plans are available to determine the disposal requirements. Regardless of the disposal requirements, the Contractor is required to prepare a task-specific Lead Compliance Plan (LCP) as required in Title 8 California Code of Regulations (8CCR); Section 1532.1, "Lead" and Cal-OSHA Construction Safety Order.	Resident Engineer, General Contractor, Hazardous Waste, Design	PS&E/Before RTL							
HAZ-6 Yellow thermoplastic painted traffic stripe and/or pavement marking contain elevated lead and chromium, which is regulated as California Hazardous Waste (non-RCRA waste). Residue produced when these materials are disturbed may contain heavy metals in concentration that exceed hazardous waste thresholds established by the California Code of Regulations (CCR) and may produce toxic fumes when heated. Removal of such material shall be properly collected, stored, transported, and disposed of in accordance with State and Federal guidelines. It is Caltrans policy to require the GC to prepare a task-specific LCP and Debris Containment and Disposal Work Plan (WP) as required by Caltrans Standard Specification and 8CCR. The LCP and WP are prepared to address worker safety and waste handling/management procedure of the generated residue from the removal operation.	Resident Engineer, General Pretractor	Pre-Construction							
HAZ-7 Residues from the removal of existing non-yellow (i.e. white, blue, etc.) thermoplastic painted and/or lead-based painted traffic stripe and/or pavement marking at the intersection can be classified as non-hazardous waste and disposed of at a permitted non-hazardous waste disposal facility (Class II or III facilities). However, the GC is required to develop a task-specific LCP and training program in conformance with 8CCR and Caltrans Standard Specifications, prior to the start of the removal operation.	Resident Engineer, General Pretractor	Pre-Construction							

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
HAZ-8 Treated Wood Waste (TWW) can occur as existing wooden posts for metal beam guard railings that are removed. The wood product is typically treated with preserving chemicals that protect against insect attack and fungal decay. These chemicals may be hazardous (carcinogenic) and include, but are not limited to, arsenic, chromium, copper, creosote, and pentachlorophenol. The Department of Toxic Substances Control (DTSC) requires that TWW is either a hazardous waste, or if not tested, the waste generator may presume that TWW is a hazardous waste (to avoid the time and expense involved in completing laboratory testing) and manage the waste by Alternative Management Standards (AMS). The AMS lessen storage requirements, extend accumulation periods, allow shipments of presumed hazardous waste TWW without manifest and registered hazardous waste haulers, and permit disposal at specific non-hazardous waste landfills.	Resident Engineer, General Contractor	Construction							
HAZ-9 Removal of existing light fixtures on traffic signal/light requires disposal of electrical equipment containing hazardous materials. The fluorescent (including ballasts containing PCB and fluorescent tubes) and mercury lighting fixtures (including lamps and housing) will be removed and requires special handling and waste management. Disposal of fluorescent light ballasts containing PCBs under 22CCR § 67426.1 et seq. Ballasts must be packaged and transported by a certified hazardous waste transporter with a current DTSC registration certificate and documentation of compliance with the California Highway Patrol Biennial Basic Inspection of Terminals Program. The hazardous waste transporter must transport the ballasts to a facility permitted for hazardous waste disposal by DTSC. Transport mercury lamps and fluorescent tubes, bulbs, and lamps to an appropriately permitted recycling or disposal facility.	Resident Engineer, General Contractor	Construction							
Air Quality									
Project Features									
PF-AQ-1 Excessive fugitive dust emissions will be controlled by regular watering or other dust preventive measures, as specified in the South Coast Air Quality Management District (SCAQMD) Rule 403.	Resident Engineer, General Contractor	Construction							
PF-AQ-2 Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.	Resident Engineer, General Contractor	Construction							
PF-AQ-3 All trucks that are to haul excavated or graded material on site will comply with California Vehicle Code Section 23114, with special attention to Sections 23114(b)(F),(e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.	Resident Engineer, General Contractor	Construction							
PF-AQ-4 The Caltrans Standard Specifications for Construction (2018), Section 14.9 must be adhered to. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.	Resident Engineer, General Contractor	Construction							

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
PF-AQ-5 If naturally occurring asbestos, serpentinite, or ultramafic rockis discovered during grading operations, Section 93105, Title 17 of the California Code of Regulations requires notification to the South Coast Air Quality Control Board by the next business day and implementation of dust control measures described in Section 93105 (d)(B).	Resident Engineer, General Contractor	Construction							
PF-AQ-6 All construction vehicles both on and off site shall be prohibited from idling in excess of 5 minutes.	Resident Engineer, General Contractor	Construction							
Avoidance and Minimization Measures									
AQ-1 Water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.	Resident Engineer, General Contractor	Construction							
AQ-2 Soil binder will be spread on any unpaved roads used for construction purposes, and on all project construction parking areas.	Resident Engineer, General Contractor	Construction							
AQ-3 Trucks will be washed as they leave the right-of-way as necessary to control fugitive dust emissions.	Resident Engineer, General Contractor	Construction							
AQ-4 Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CA Code of Regulations Title 17, Section 93114.	Resident Engineer, General Contractor	Construction							
AQ-5 Equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.	Resident Engineer, General Contractor	Construction							
AQ-6 Environmentally sensitive areas will be established near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible.	Resident Engineer, General Contractor	Construction							
AQ-7 Track-out reduction measures, such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.	Resident Engineer, General Contractor	Construction							
AQ-8 All transported loads of soils and wet materials will be covered before transport, or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation.	Resident Engineer, General Contractor	Construction							
AQ-9 Dust and mud that are deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce PM emissions.	Resident Engineer, General Contractor	Construction							
AQ-10 To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.	Resident Engineer, General Contractor	Construction							
AQ-11 Mulch will be installed, or vegetation planted as soon as practical after grading to reduce windblown PM in the area. Be aware that certain methods of mulch placement, such as straw blowing, may themselves cause dust and visible emission issues and may require controls such as dampened straw.	Resident Engineer, General Contractor	Construction							

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
Noise and Vibration									
Avoidance and Minimization Measures									
NOI-1 All equipment shall have sound-control devices that are no less effective than those provided on the original equipment. No equipment shall have an un-muffled exhaust.	Resident Engineer, General Contractor	Construction							
NOI-2 As directed by the Caltrans Resident/Project Engineer, the contractor shall implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.	Resident Engineer, General Contractor	Construction							
NOI-3 All work shall adhere to Caltrans Standard Specifications, Section 7-1.01I, "Sound Control Requirements," which states that noise levels generated during construction will comply with applicable local, State, and federal regulations, and that all equipment will be fitted with adequate mufflers according to the manufacturers' specifications.	Resident Engineer, General Contractor	Construction							
NOI-4 Noise control shall conform to the provisions in Section 14-8.02, "Noise Control," of the Caltrans Standard Specifications. Control and monitor noise resulting from work activities; Do not exceed 86 dBA Lmax at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.	Resident Engineer, General Contractor	Construction							
Energy									
Avoidance and Minimization Measures									
E-1 The most energy efficient lighting fixtures should be utilized to replace the existing light fixtures.	Design, Project Engineer	PS&E/Before RTL							
Biological Environment									
Natural Communities									
Project Features									
PF-BIO-1 To avoid impacts to nesting birds, any native or exotic vegetation removal or tree- trimming activities will occur outside the nesting season (February 1 through September 1). In the event that vegetation clearing is necessary during the nesting season, a preconstruction survey will be conducted by a qualified biologist within 3 days of commencement of vegetation removal or the beginning of construction activities to identify the locations of nests. Should nesting birds be found, an exclusionary buffer will be established by the biologist.	Project Biologist, Resident Engineer	Pre-Construction							
Avoidance and Minimization Measures									
NC-1 All pollution and litter laws and regulations will be followed by all personnel on site.	Resident Engineer, General Contractor	Construction							

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
NC-2 The Division of Environmental Planning will be provided the Project Specifications and Expenditures Review Package for review and comments.	Design, Project Engineer, Project Manager	PS&E/Before RTL							
NC-3 If the project scope should change for any reason, the Division of Environmental Planning will be notified to determine whether current environmental documentation is adequate.	Design, Project Engineer, Project Manager	PS&E/Before RTL							
Wetlands									
Plant Species									
Project Features									
PF-BIO-2 The construction contractor shall inspect and clean construction equipment at the beginning of each day and prior to transporting equipment from one Project location to another. Any plants removed, or soil disturbed during the course of construction should be contained and properly disposed of offsite. All mulch, topsoil, seed mixes, or other plantings used during landscaping activities and erosion-control Best Management Practices (BMPs) implemented will be free of invasive plant species seeds or propagules listed on the California Invasive Plant Council (Cal-IPC) Inventory. City tree planting and removal requirements will be adhered to.	General Contractor	Construction							
Avoidance and Minimization Measures									
PS-1 Biological monitor is needed when construction is taking place at Post Mile 0.04.	Project Biologist, Resident Engineer	Construction							
PS-2 Environmentally Sensitive Area (ESA) fencing will be set up to create a buffer for the rare plant, prior to any construction, clearing or grubbing.	Project Biologist, Resident Engineer	Construction							
PS-3 If any sensitive plant species are observed within the project footprint and are unavoidable, they should be relocated/transported by a qualified botanist to the similar habitat.	Botanist, Project Biologist, Resident Engineer	Construction							
PS-4 If any species of concern are observed during any phase or construction, the Resident Engineer (RE) will need to contact the Environmental Planner (District Biologist), Rico Ramirez, at 213-266-3783 and all work shall be postponed immediately.	Resident Engineer, Project Biologist	Construction							
PS-5 Caltrans will perform at least two species specific surveys at the peak and near the end of the flowering season for Southern tarplant within the project footprint. Caltrans will follow Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities by CDFW. A survey report will be written and supplied to CDFW.	Project Biologist	Pre-Construction							
PS-6 Caltrans will use a standard specification that stockpiles the top layer of the soil in the temporary impact areas. The stockpiled soil will contain the existing seed bank.	Project Biologist, Resident Engineer	Pre-Construction/ Construction							

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
Animal Species									
Avoidance and Minimization Measures									
AS-1 The District Biologist will survey Bridge 53-0060 (San Gabriel River Bridge) prior to commencement of construction, to determine if green sea turtles, and/or California least terns are present.	Project Biologist, Resident Engineer	Pre-Construction							
AS-2 The District Biologist will monitor Bridge 53-0060 (San Gabriel River Bridge) for green sea turtles and California least terns during construction to prevent unanticipated impacts to these species.	Project Biologist, Resident Engineer	Pre-Construction							
AS-3 The District Biologist will survey Bridge 53-0060 (San Gabriel River Bridge) in the recognized bat maternity season (March 1 through October 31) prior to commencement of construction to determine if roosting bats are present. The District Biologist will also conduct a preconstruction survey at Bridge 53-0060 (San Gabriel River Bridge) no more than two weeks prior to commencement of construction to determine the presence or absence of bats. If bats are discovered at the site, no construction activities shall begin until approved bat exclusionary devices equipped with exit-only materials and roosting preventive measures are put in place on all features with potential for roosting bats that would be impacted by the proposed project activities in order to prevent bat occupation. Bat exclusionary devices shall be installed under the supervision of a CDFW approved biologist. If bats were observed, the District Biologist will conduct daily surveys during construction to determine the presence or absence of regulated bat species. If bat maternity roosting is confirmed, construction activities shall avoid the recognized bat maternity season (March 1 through October 31) to prevent potential mortality of flightless young bats.	Project Biologist, Resident Engineer	Pre-Construction							
AS-4 The Project Biologist must be invited to the pre-construction meeting, with one week prior notice.	Project Biologist, Resident Engineer	Pre-Construction							
AS-5 Construction activity, including vegetation removal, shall be scheduled to occur between February 1st to September 1st to avoid the bird nesting season. If that is not feasible, the Caltrans Biologist shall be notified 2 weeks in advance so that preconstruction nesting bird surveys can be conducted. If nesting birds are observed, construction activity in the immediate area shall not occur until it is determined that the young birds have left the nest. A buffer zone shall be established and maintained during all phases of construction (150 feet for songbirds and 500 feet for raptors) to ensure that nesting birds are not adversely affected.	Project Biologist, Resident Engineer	Pre-Construction/ Construction							
AS-6 Caltrans will develop an acoustic monitoring plan that will outline the methods for avoiding adverse impacts to green sea turtles. The Noise unit will develop a sound monitoring plan and keep attenuation at ambient.	Project Biologist, Resident Engineer, Noise Specialist	Pre-Construction							

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce	
					Initials	Date		Initials	Date
AS-7 Caltrans will conduct bat acoustic surveys during the next bat maternity season to evaluate the presence or absence of bats at the San Gabriel River bridge and surrounding areas.	Project Biologist	Pre-Construction							
AS-8 If California least terns are observed within the project vicinity, construction activities will immediately cease and CDFW and USFWS will be notified.	Project Biologist, Resident Engineer	Pre-Construction/ Construction							
AS-9 Caltrans will evaluate the project location as potential fish passage constraint during the next Plans, Specifications and Estimates (PS&E) phase of the project.	Project Biologist	PS&E/Before RTL							
AS-10 Based on results of fish study and if steelhead is found within the channel, then Caltrans will apply and consult with CDFW for an incidental Take Permit (ITP). Caltrans will work during the appropraite season (November 1 through April 30) only if steelhead are found within the proejct limits.	Project Biologist	Pre-Construction/ Construction							
Threatened and Endangered Species									
Avoidance and Minimization Measures									
TE-1 Biological monitor is needed when construction is taking place at Post Mile 0.04. The District Biologist will monitor for green sea turtles and California least tern during construction to prevent unanticipated impacts to these species.	Project Biologist/ Resident Engineer	Construction							
TE-2 Environmentally Sensitive Area (ESA) fencing will be set up to create a buffer for the rare plant, prior to any construction, clearing, or grubbing.	Project Biologist/ Resident Engineer	Pre-Construction							
TE-3 The District Biologist will survey Bridge 53-0060 (San Gabriel River Bridge) for green sea turtles and California least terns prior to commencement of construction.	Project Biologist/ Resident Engineer	Pre-Construction							
TE-4 If listed and/or protected species are discovered during construction, all work shall cease, and the Caltrans Biologist shall be notified immediately. No work shall continue until coordination with USFWS and/or CDFW has been conducted and a protection plan implemented.	Project Biologist/ Resident Engineer, General Contractor	Construction							
Invasive Species									
Avoidance and Minimization Measures									
IS-1 The revegetation of the Project areas shall incorporate native plant species, where possible. Any revegetation at the San Gabriel River Bridge (Bridge 53-0060) shall exclusively use native plant species. A revegetation plan shall be developed by the District Landscape Architect in coordination with the District Biologist.	Project Biologist, Landscape Architect, Resident Engineer	Construction/Post Construction							

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance		
					Initials	Date		Initials	Date	
CC-2 Schedule truck trips outside of peak morning and evening commute hours.	Resident Engineer, General Contractor	Construction								
CC-3 Schedule longer-duration lane closures to reduce number of equipment mobilization efforts. (Combine with public information efforts for congested areas.)	Resident Engineer, General Contractor	Construction								
CC-4 For improved fuel efficiency from construction equipment: Maintain equipment in proper tune and working condition, use right-sized equipment for the job, and use equipment with new technologies.	Resident Engineer, General Contractor	Construction								
CC-5 Use alternative fuels such as renewable diesel for construction equipment (where feasible and available).	Resident Engineer, General Contractor	Construction								
CC-6 Use solar-powered construction equipment (where feasible and available).	Resident Engineer, General Contractor	Construction								
CC-7 Apply earthwork balance: reduce the need for transport of earthen materials by balancing cut and fill quantities. **https://www.sustainablehighways.org/764/178/earthwork-balance.html** (The application of this measure is contingent upon soil classifications and disposal guidance listed in Hazardous Waste Specifications. See Environmental Commitments Record).	Resident Engineer, General Contractor	Construction								
CC-8 Supplement existing construction environmental training with information on methods to reduce GHG emissions related to construction.	Resident Engineer, General Contractor	Pre-Construction								
CC-9 Use accelerated bridge construction (ABC) method. (Reduce construction windows, uses more precast elements that in turn reduce need for additional falsework, forms, bracing, etc.).	Resident Engineer, General Contractor, Design	Pre-Construction/ Construction								
CC-10 Salvage rebar from demolished concrete and process waste to create usable fill.	Resident Engineer, General Contractor	Construction								
CC-11 Maximize use of recycled materials (tire rubber for example).	Resident Engineer, General Contractor	Construction								
CC-12 Recycle existing project features on-site (For example, MBGR light standards, Sub-base Granular Material or native material that meets Caltrans specifications for incorporation into new work.)	Resident Engineer, General Contractor	Construction/Post Construction								
CC-13 Reduce construction waste. For example, reuse or recycle construction and demolition waste (reduces consumption of raw materials, reducing waste and transportation to landfill; saves costs).	Resident Engineer, General Contractor	Construction								
CC-14 Use recycled water or reduce consumption of potable water for construction.	Resident Engineer, General Contractor	Construction								
CC-15 Select pavement materials that lower the rolling resistance of highway surfaces as much as possible while still maintaining design and safety standards.	Resident Engineer, General Contractor	Pre-Construction/ Construction								

Task and Brief Description	Responsible Branch, Staff	Timing, Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliannce		
					Initials	Date		Initials	Date	
CC-16 Specify Long-Life Pavement. Minimize life-cycle costs by designing long-lasting pavement structures. Consider future climate conditions in decisions. **https://www.sustainablehighways.org/764/179/long-life-pavement.html**	Resident Engineer, General Contractor	Construction								
CC-17 Use permeable pavements to reduce "urban heat islands". The void structure of pervious concrete acts as insulation and prevents the pavement from storing heat that would otherwise raise air temperatures (resulting in a greater use of air conditioning in nearby buildings). **https://blog.nwf.org/2009/12/permeable-concrete-reduces-emissions/**	Resident Engineer, General Contractor	Construction								
CC-18 Produce HMA using warm mix technology. https://www.fhwa.dot.gov/pavement/asphalt/wma.cfm	Resident Engineer, General Contractor	Pre-Construction/ Construction								
CC-19 Replace lighting with ultra-reflective sign materials that are illuminated by headlights to reduce energy used by electric lighting.	Resident Engineer, General Contractor, Design	Construction								
CC-20 Elevate mechanical/electrical equipment (in a manner that still fits project design goals and standards).	Resident Engineer, General Contractor	Construction								
CC-21 Use corrosion-resistant materials	Resident Engineer, General Contractor	Construction								
CC-22 Improve drainage and improve drainage systems to adapt to localized flooding risks.	Resident Engineer, General Contractor, Design	Construction								

Appendix F. List of Acronyms and Abbreviations

A

AADT	Average Annual Daily Traffic
ACM	Asbestos Containing Material
ADA	Americans with Disabilities Act
ADL	Aerially Deposited Lead
AIA	Airport Influence Area
APCD	Air Pollution Control District
ARB	Air Resources Board
AVAP	Antelope Valley Area Plan
AVAQMD	Antelope Valley Air Quality Management District
AQB	Air Quality Branch
AQMD	Air Quality Management District

B

BA	Biological Assessment
BAU	Business as Usual
BFE	Base Flood Elevation
BMP	Best Management Practices
BSA	Biological Study Area

C

CAFE	California Endangered Species Act
Caltrans	California Department of Transportation
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CDTFA	California Department of Tax and Fee Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERFA	Community Environmental Response Facilitation Act
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations

CGP	Construction General Permit
CGS	California Geotechnical Survey
CHP	California Highway Patrol
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CTP	California Transportation Plan
CWA	Clean Water Act

D

DOT	California Department of Transportation
DPGR	District Preliminary Geotechnical Report
DTSC	California Department of Toxic Substances Control

E

EB	East Bound
EDF	Evaluation Documentation Form
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
EPACT92	Energy Policy Act of 1992
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
ESA	Environmental Site Assessment
ESHA	Environmentally Sensitive Habitat Area

F

FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
FRID	Final Relocation Impact Document
FTIP	Federal Transportation Improvement Program

G

GHG	Greenhouse Gas

H

I

ICE	Intersection Control Evaluation
IPAC	Information, Planning, and Consultation System
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study

L

LCFs	Low Carbon Fuel Standard
LCP	Lead Compliance Plan
LEDPA	Least Environmentally Damaging Practicable Alternative
LOS	Level of Service

M

MBTA	Migratory Bird Treaty Act
MPH	Miles Per Hour
MPM	Maximum Probability Magnitude
MPO	Metropolitan Planning Organization
MBTA	Migratory Bird Treaty Act
MS4	Municipal Separate Storm Sewer Systems

N

NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NB	North Bound
NEPA	National Environmental Policy Act
NHTSA	National Highway Traffic Safety Administration
NOAA	National Oceanic and Atmospheric Association
NPDES	National Pollutant Discharge Elimination System

NRCS	Natural Resources Conservation Service

O

OEE	Office of Environmental Engineering
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Act
OSTP	Office of Science and Technology Policy

P

PBDB	Paleobiology Database
PDT	Project Development Team
PER	Paleontological Evaluation Report
PF	Project Feature
PM	Post Mile
PPDG	Project Planning and Design Guide
PRC	Public Resource Code
PS&E	Project Specifications and Estimates

R

RAP	Relocation Assistance Program
RCRA	Resource Conservation and Recovery Act
RE	Resident Engineer
ROW	Right-of-way
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board

S

SB	South Bound
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Community Strategies
SDS	Seismic Design Criteria

SFHA	Special Flood Hazard Area
SIP	State Implementation Plan
SLR	Sea Level Rise
SMARTS	Storm Water Multiple Application and Report Tracking System
SSC	Species of Special Concern
STLC	Soluble Threshold Limit Concentration
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board

T

TASAS	Traffic Accident Surveillance and Analysis System
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Loads
TMP	Transportation Management Plan
TNSR	Traffic Noise Study Report
TOD	Transit-Oriented Development
TSCA	Toxic Substance Control Act
TTLC	Total Threshold Limit Concentration
TWW	Treated Wood Waste

U

UCMP	University of California Museum of Paleontology
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

V

VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled

W

WB	West Bound
WDR	Waste Discharge Requirements
WPCP	Water Pollution Control Program

Appendix G. List of Technical Studies

Air Quality Technical Memorandum (April 2022)
Prepared by Caltrans

District Preliminary Geotechnical Data (January 2022)
Prepared by Caltrans

Questionnaire to Determine Visual Impact Assessment (August 2021)
Prepared by Caltrans

Noise and Vibration Technical Memo (August 2021)
Prepared by Caltrans

Natural Environment Study (December 2021)
Prepared by Caltrans

Hazardous Waste Assessment (December 2021)
Prepared by Caltrans

Hazardous Waste Re-Assessment (March 2022)
`Prepared by Caltrans

Storm Water Data Report (April 2022)
Prepared by Caltrans

Location Hydraulic Study (June 2022)
Prepared by Caltrans

Paleontological Identification Report and Paleontological Evaluation Report (April 2022)
Prepared by LSA Consultants

Sea Level Rise Analysis (June 2022)
Prepared by HNTB Corporation

Right of Way Data Sheet (November 2021)

Prepared by Caltrans

Historic Property Survey Report (January 2022)

Prepared by Caltrans

Archaeological Survey Report (December 2021)

Prepared by Caltrans

Draft Project Report (June 2022)

Prepared by TranSystems

Appendix H. RTP and FTIP Listings

#19-30 LA LALS04 Bridge Rehabilitation SHOPP

FTIP ID LALS04

FTIP ID: LALS04 , 999 - 0.0 / 0.0 - Route 999: Grouped Projects For Bridge Rehabilitation And Reconstruction - SHOPP Program. Projects Are Consistent With 40 CFR Part 93.126 Exempt Tables 2 Categories - Widening Narrow Pavements Or Reconstructing Bridges (No Additional Travel Lanes)

DISTRICT 7 (Los Angeles County) - 2019 FTIP - MPO: SCAG
CYCLE: 18/19 - 23/24
FTIP AMENDMENT#: 19-30 [PROJECT LISTING]

FUND NAME	EA	PROJECT LOCATION/DESCRIPTION	FTIP AMENDMENT	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
SHOPPAC	29140	Route 001: In Malibu, from Guernsey Avenue to Trancas Canyon Road/Broad Beach Road. Replace bridge.	19-30	$ 35,000		$ 17,509			
	29180	Route 999 (Various): In Pasadena, At Orange Grove Boulevard-E134/134 Overcrossing No. 53-2269S; Also On Route 710, At Union Street Overcrossing No. 53-2537 (Pm R32.5). Bridge Seismic Retrofit And Bridge Rail	19-01	$ 7,380					
	30160	Route 091: In Compton, at Compton Creek Bridge Overhead and offramp No. 53-2235 and No. 53-2237S; also in Long Beach, on Routes 710 and 110, at Harbor Scenic Drive Overhead No. 53-2934 (PM 6.0) and Gaffy Street Bridge No. 53-0397Y (PM R0.8). Bridge seismic retrofit and bridge rail upgrade. (G13 Contingency) - Total Project Cost: $24,788,000	19-30	$ 3,975			$ 1,926		
	30480	Route 405: In Carson, at Dolores Yard Overhead No. 53-1168. Upgrade bridge drainage system.	19-24	$ 864		$ 5,644			
	30930	Route 210: In Los Angeles County, on Routes 210, 405 and 605 at various locations. Bridge seismic retrofit and bridge rail upgrade at five locations.	19-18		$ 9,399				
	31420	Route 005: In The City Of Los Angeles, At Sun Valley Overhead Bridge No. 53-1134. Paint Bridge And Replace Deck Drain Systems.	19-01		$ 9,049				
	31680	Route 105: In El Monte, At Rio Hondo Busway Bridge No. 53-2637. Replace Bridge Deck.	19-30			$ 1,937	$ 11,384		
	31790	Route 101: Near Encino, at the Encino Pedestrian Overcrossing No. 53-1289. Replace pedestrian overcrossing.	19-14	$ 12,077					
	31910	Route 710: In Long Beach, at the northbound Route 710 to eastbound Route 91 connector, below Artesia Boulevard Overcrossing No. 53-0820 and E91-N710 Connector Overcrossing No. 53-2241G. Lower profile of connector to achieve standard vertical clearance.	19-24	$ 910	$ 2,511	$ 5,343			
	32090	Route 001: In Long Beach, at the San Gabriel River Bridge No. 53-0060. Widen bridge and upgrade bridge rail.	19-24			$ 1,555	$ 3,709		$ 44,370
	32100	Route 405: In Long Beach, at the San Gabriel River Bridge No. 53-1185 and SB 605 to NB I-405 Connector Bridge No. 53-1737H; also in Orange County on Route 405 at the SB 405 to NB 605 Connector Bridge No. 55-0413F. Retrofit scour critical bridges to preserve the structural integrity of the bridges by enlarging and deepening pile cap, adding Cast in Drilled Hole (CIDH) piles and reinforcing the area with Rock Slope Protection (RSP). (G13 Contingency) - Total Project Cost: $31,205,000	19-30		$ 6,482		$ 254		
	32230	Route 110: In the city of Los Angeles, at the 5th Street Overcrossing No. 53-0685 and 6th Street Overcrossing No. 53-0746. Upgrade bridge railing.	19-24	$ 465	$ 1,703	$ 5,667			
	32240	Route 134: In Pasadena, at the Arroyo Seco Bridge No. 53-0166. Replace/upgrade bridge railing.	19-30	$ 1,300			$ 12,897		
	32250	Route 103: In the city of Los Angeles, at the Union Pacific Overhead No. 53-2626. Replace the bridge deck with composite reinforced concrete. (G13 Contingency) - Total Project Cost: $32,684,000	19-24	$ 1,045	$ 3,482		$ 1,730		
	32520	Route 210: In Irwindale, on the San Gabriel River Bridge No. 53-1867. Reconstruct hinge diaphragms at hinge 4 and hinge 6, upgrade bridge railing and reinstall electroliers.	19-24	$ 1,061	$ 4,109	$ 23,537			
	32590	Route 005: Near Kern County line, at the Tejon Pass Overcrossing No. 53-1779. Seismic retrofit of bridge, widen bridge abutments, add steel casing to bent columns, retrofit bent foundation and install micropiles.	19-24	$ 700		$ 2,056	$ 3,620		
	32620	Route 039: In Azusa at the San Gabriel River Bridge No. 53-0113 (PM 17.81); also in Pomona on Route 71 at the Ridgeway Street Undercrossing Bridge No. 53-2052 (PM R0.92). Seismic retrofit, barrier replacement, paint San Gabriel River Bridge. (G13 Contingency) - Total Project Cost: $31,525,000	19-30	$ 1,372	$ 4,488		$ 101		
	32830	Route 010: In El Monte, from Baldwin Avenue Overcrossing to Route 605 at Rio Hondo Bridge No. 53-657, East El Monte Overhead No. 53-0867 and San Gabriel River Bridge No. 53-109L/R. Replace overhang joints with reinforced concrete closure pours.	19-30	$ 813	$ 3,048		$ 10,628		
	32860	Route 105: In the city of South Gate, at Paramount Boulevard Overcrossing No. 53-2425; also in the city of Downey, at Ardis Avenue Overcrossing No. 53-2572. Apply waterproof coating, replace joint seals, add manholes to overcrossing structures, and apply methacrylate to Ardis Avenue Overcrossing deck.	19-30	$ 259	$ 917	$ 2,389			
	34210	Route 005: In Los Angeles County, At Various Locations. Establish Standard Vertical Clearance.	19-03		$ 488,900				
	34340	Route 039: In Los Angeles County, Near Azusa, at the North Fork San Gabriel River Bridge No. 53-2245. Replace bridge.	19-14	$ 20,199					
	34490	Route 103: In the city of Los Angeles, near Wilmington, at the Anaheim Street Overhead No. 53-2627. Upgrade bridge rail.	19-24			$ 872	$ 1,816		$ 7,766
	34610	Route 001: In Long Beach, at Los Angeles River Bridge No. 53-0341 and De Forest Avenue Undercrossing No. 53-1047. Seismic retrofit, upgrade bridge rails, and upgrade facilities to Americans with Disabilities Act (ADA) standards. (G13 Contingency) - Total Project Cost: $32,784,000	19-24			$ 1,570	$ 4,561	$ 238	

TABLE 1 FTIP Projects – Continued

County	System	FTIP ID	Route #	Description	Project Cost ($1,000's)
LOS ANGELES	STATE HIGHWAY	LA0G951	138	PALMDALE BLVD (SR 138) @ 15TH STREET EAST TRAFFIC SIGNAL: PROJECT INCLUDES A TRAFFIC SIGNAL AT 15TH ST E, INCLUDING PCC AND AC RECONSTRUCTION, STRIPING, TRAFFIC CONTROL. UTILIZING TOLL CREDITS.	$1,025
LOS ANGELES	STATE HIGHWAY	LA0G956	1	PACIFIC COAST HIGHWAY RAISED MEDIAN CHANNELIZATION FROM WEBB WAY TO PUERCO CANYON ROAD. INSTALL RAISED MEDIANS ON PACIFIC COAST HIGHWAY FOR A DISTANCE OF APPROXIMATELY 2 MILES.	$6,950
LOS ANGELES	STATE HIGHWAY	LA960142	101	RTE 101/LINDERO CANYON ROAD INTERCHANGE IMPROVEMENT PROJECT. LINDERO CYN RD BTW VIA COLINAS AND AGOURA RD WIDENED FROM 2 TO 3 LANES IN EACH DIRECTION. RAMP G-6 WIDENED TO 2 LANES TO PROVIDE FOR 2 FREE RT LANES FOR EASTBOUND VIA COLINAS TRAFFIC AT LINDERO CYN RD. THE EXISTING NORTHBOUND AUX LANE WILL BE EXTENDED SOUTHERLY FROM ITS TERMINUS AT RAMP G-6 TO RAMP G-3. INCLUDES BIKE PATH CONSTRUCTION (.49 MILES).	$26,502
LOS ANGELES	STATE HIGHWAY	LA996143	710	ROUTE 710: RTE 710 PCH TO DOWNTOWN L.B., PAVEMENT RECON, MEDIAN, LANDSCAPING IMPROVE (EA 2203U, 23640, PPNO: 2945,3248)	$7,496
LOS ANGELES	STATE HIGHWAY	LAE0574	605	ROUTE 605: CONSTRUCT I-605 INTERCHANGE IMPROVEMENTS IN IRWINDALE (NO LANE ADDITION). UTILIZING TOLL CREDITS.	$1,920
LOS ANGELES	STATE HIGHWAY	LAE2577	5	ROUTE 5: STUDY NORWALK, SANTA FE SPRINGS, DOWNEY, MONTEBELLO, & COMMERCE: ON I-5, CONDUCT PLAN'G, ENV. STUDIES FOR WIDEN'G W/HOV & MIXED FLOW LNS FROM I-605 TO I-710.(EA2159E, 2159F, PPNO 2808C, 2808D)PAED ONLY	$1,402
LOS ANGELES	STATE HIGHWAY	LAF1103	405	ROUTE 405: WILMINGTON AVENUE INTERCHANGE MODIFICATION AT I-405. IMPROVE I-405/WILMINGTON AVENUE INTERCHANGE BY ADDING A NEW NORTHBOUND ON-RAMP AND WIDENING OF WILMINGTON AVENUE, 223RD, AND EXISTING ON- AND OFF-RAMPS. [CITY PROJ NO. 919]	$26,171
LOS ANGELES	STATE HIGHWAY	LAF7200	60	WB SR-60/SB SR-57 GRAND AVENUE OFF RAMP INTERCHANGE : ADD WB SR-60 AUXILIARY LANE FROM SB SR-57 TO GRAND AVENUE OFF-RAMP TO IMPROVE TRUCK MOBILITY AND REDUCE CONGESTION.	$21,303
LOS ANGELES	STATE HIGHWAY	LALS01	999	ROUTE 999: GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SHOPP COLLISION REDUCTION PROGRAM. PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 AND TABLE 3 CATEGORIES - RAILROAD/HIGHWAY CROSSING, SAFER NON-FEDERAL-AID SYSTEM ROADS, SHOULDER IMPROVEMENTS, TRAFFIC CONTROL DEVICES AND OPERATING ASSISTANCE OTHER THAN SIGNALIZATION PROJECTS, INTERSECTION SIGNALIZATION PROJECTS AT INDIVIDUAL INTERSECTIONS, PAVEMENT MARKING DEMONSTRATION, TRUCK CLIMBING LANES OUTSIDE THE URBANIZED AREA	$412,965
LOS ANGELES	STATE HIGHWAY	LALS02	999	ROUTE 999: GROUPED PROJECTS FOR PAVEMENT RESURFACING AND/OR REHABILITATION - SHOPP ROADWAY PRESERVATION PROGRAM . PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 CATEGORIES - PAVEMENT RESURFACING AND/OR REHABILITATION, EMERGENCY RELIEF (23 U.S.C. 125), WIDENING NARROW PAVEMENTS OR RECONSTRUCTING BRIDGES (NO ADDITIONAL TRAVEL LANES)	$1,648,919
LOS ANGELES	STATE HIGHWAY	LALS03	999	ROUTE 999: GROUPED PROJECTS FOR SHOULDER IMPROVEMENTS - SHOPP ROADSIDE PRESERVATION PROGRAM. PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 CATEGORIES - FENCING,SAFETY ROADSIDE REST AREAS	$6,393
LOS ANGELES	STATE HIGHWAY	LALS04	999	ROUTE 999:IN L.A. GROUPED PROJECTS FOR BRIDGE REHABILITATION AND RECONSTRUCTION - SHOPP PROGRAM. PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 CATEGORIES - WIDENING NARROW PAVEMENTS OR RECONSTRUCTING BRIDGES (NO ADDITIONAL TRAVEL LANES).	$367,118
LOS ANGELES	STATE HIGHWAY	LALS06	999	ROUTE 999: GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SHOPP MOBILITY PROGRAM. PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 AND TABLE 3 CATEGORIES - RAILROAD/HIGHWAY CROSSING, SAFER NON-FEDERAL-AID SYSTEM ROADS, SHOULDER IMPROVEMENTS, TRAFFIC CONTROL DEVICES AND OPERATING ASSISTANCE OTHER THAN SIGNALIZATION PROJECTS, INTERSECTION SIGNALIZATION PROJECTS AT INDIVIDUAL INTERSECTIONS, PAVEMENT MARKING DEMONSTRATION, TRUCK CLIMBING LANES OUTSIDE THE URBANIZED AREA	$261,984
LOS ANGELES	STATE HIGHWAY	LALS07	999	ROUTE 999: GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SHOPP MANDATES PROGRAM. PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 AND TABLE 3 CATEGORIES - RAILROAD/HIGHWAY CROSSING, SAFER NON-FEDERAL-AID SYSTEM ROADS, SHOULDER IMPROVEMENTS, TRAFFIC CONTROL DEVICES AND OPERATING ASSISTANCE OTHER THAN SIGNALIZATION PROJECTS, INTERSECTION SIGNALIZATION PROJECTS AT INDIVIDUAL INTERSECTIONS, PAVEMENT MARKING DEMONSTRATION, TRUCK CLIMBING LANES OUTSIDE THE URBANIZED AREA	$586,191

Appendix I. References

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Appendix J. Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901

In Reply Refer To:
Project Code: 2022-0051250
Project Name: SR-1 Bridge Rail Upgrade

December 16, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A biological assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a biological assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a biological assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at the Fish and Wildlife Service's Endangered Species Consultation website at:

https://www.fws.gov/endangered/what-we-do/faq.html

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Project Code: 2022-0051250
Project Name: SR-1 Bridge Rail Upgrade
Project Type: Bridge - Maintenance
Project Description: The location is along State Route 1 over the San Gabriel River, the scope of work is currently to widen, rehabilitate and replace portions of the bridge. The current timing for the bridge to start construction in late 2024 or late 2025.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.7521716,-118.106270679116,14z

Counties: Los Angeles County, California

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Pacific Pocket Mouse *Perognathus longimembris pacificus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8080	Endangered

Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Salt Marsh Bird's-beak *Cordylanthus maritimus ssp. maritimus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6447	Endangered
Ventura Marsh Milk-vetch *Astragalus pycnostachyus var. lanosissimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1160	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: California Department of Transportation District 7
Name: Rico Ramirez
Address: 100 S Main St
City: Los Angeles
State: CA
Zip: 90012
Email rico.ramirez@dot.ca.gov
Phone: 2132663783

CNPS Rare Plant Inventory

Search Results

18 matches found. Click on scientific name for details

Search Criteria: County is one of [LAX], Quad is one of [3311871]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
Astragalus hornii var. hornii	Horn's milk-vetch	Fabaceae	annual herb	May-Oct	None	None	GUT1	S1	1B.1	No Photo Available
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G1G2	S1	1B.1	No Photo Available
Calystegia felix	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep	None	None	G1Q	S1	1B.1	No Photo Available
Camissoniopsis lewisii	Lewis' evening-primrose	Onagraceae	annual herb	Mar-May(Jun)	None	None	G4	S4	3	No Photo Available
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.1	No Photo Available
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	FE	CE	G4?T1	S1	1B.2	No Photo Available
Juncus acutus ssp. leopoldii	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2	 © 2019 Belinda Lo
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1	 © 2013 Keir Morse
Lycium californicum	California box-thorn	Solanaceae	perennial shrub	Mar-Aug(Dec)	None	None	G4	S4	4.2	No Photo Available
Nama stenocarpa	mud nama	Namaceae	annual/perennial herb	Jan-Jul	None	None	G4G5	S1S2	2B.2	No Photo Available
Nemacaulis denudata var. denudata	coast woolly-heads	Polygonaceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.2	No Photo Available
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1	No Photo Available

Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	None	None	G1	S1	1B.1	No Photo Available
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	 ©2013 Debra L. Cook
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	None	None	G4	S2	2B.2	No Photo Available
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(Jan-May)Jul-Oct	None	None	G3	S2	1B.2	No Photo Available
Suaeda taxifolia	woolly seablite	Chenopodiaceae	perennial evergreen shrub	Jan-Dec	None	None	G4	S4	4.2	No Photo Available
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov	None	None	G2	S2	1B.2	No Photo Available

Showing 1 to 18 of 18 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 16 December 2022].

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Los Alamitos (3311871))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Astragalus hornii var. hornii Horn's milk-vetch	PDFAB0F421	None	None	GUT1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S1S2	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Chelonia mydas green turtle	ARAAA02010	Threatened	None	G3	S1	
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela latesignata western beach tiger beetle	IICOL02110	None	None	G2G3	S1	
Cicindela senilis frosti senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2	S2	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Habroscelimorpha gabbii western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G4G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Microtus californicus stephensi south coast marsh vole	AMAFF11035	None	None	G5T2T3	S2	SSC
Nama stenocarpa mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Nemacaulis denudata var. denudata coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Passerculus sandwichensis beldingi Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S4	SSC
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Sorex ornatus salicornicus southern California saltmarsh shrew	AMABA01104	None	None	G5T1?	S1	SSC
Southern Coastal Salt Marsh Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Spea hammondii western spadefoot	AAABF02020	None	None	G2G3	S3S4	SSC
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Suaeda esteroa estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	

Record Count: 39

Government Version – Dated December, 2 2022 – Biogeographic Data Branch

Report Printed on Thursday, December 15, 2022

Page 2 of 2

Information Expires 6/2/2023

Appendix K. Public Notices

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CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 7
100 SOUTH MAIN STREET, SUITE 100 | LOS ANGELES, CA 90012
PHONE (213) 897-0362 | FAX (213) 897-0360 TTY 711
www.dot.ca.gov

September 30, 2022

<Mr./Ms./The Honorable Name>
<Title>
<Organization>
<Address>
<City, ST ZIP>

Dear <Mr./Ms./Senator/Secretary>:

Notice of Intent (NOI) to Adopt a Negative Declaration and Notice of Availability (NOA) of an Environmental Assessment for the San Gabriel River Bridge Rail Upgrade and Widening Project

The California Department of Transportation (Caltrans) has completed the Initial Study with proposed Negative Declaration/Environmental Assessment (IS/EA) and Section 4(f) Evaluation for the San Gabriel River Bridge Rail Upgrade and Widening Project (Br. No. 53-0060). The proposed project would upgrade the existing bridge railing with a California Coastal Commission approved bridge railing type and widen the bridge to current design standards. The bridge is located over the San Gabriel River Channel in the City of Long Beach on State Route 1 (SR-1) at Post Mile (PM) 0.04. The project aims to improve mobility and enhance traffic safety for all users. The project would incorporate active transportation (Complete Streets) elements and fulfill Americans with Disabilities Act (ADA) requirements. The IS/EA provides information on the proposed Build Alternatives.

A hard copy of the document is available for viewing at the following locations during normal business hours:

- Bay Shore Neighborhood Library, 195 Bay Shore Ave., Long Beach, CA 90803
- Los Altos Neighborhood Library, 5614 E Britton Dr., Long Beach, CA 90815
- Brewitt Neighborhood Library, 4036 E Anaheim St., Long Beach, CA 90804
- OC Library - Seal Beach Branch, 707 Electric Ave., Seal Beach, CA 90740
- Caltrans, District 7, 100 S. Main Street, Los Angeles, CA 90012

Technical Studies in support of the IS/EA and printed copies of the aforementioned documents are available upon request.

The Draft IS/EA may also be viewed online at https://dot.ca.gov/caltrans-near-

<Mr./Ms./The Honorable Name>, <Title>
<Date>
<Page 2

me/district-7/district-7-programs/d7-environmental-docs or via the CEQAnet web portal at https://ceqanet.opr.ca.gov/.

A public hearing is not being planned at this time but will be provided upon request. If you would like a public hearing, please submit your request to Ron Kosinski at the physical or email address below no later than October 20, 2022.

Caltrans invites public comment on the Draft IS/EA and Section (4f) Evaluation in response to this NOI/NOA. A 30-day comment period will begin on October 6, 2022 and end on November 4, 2022.

Please send your comments by mail to:

Ron Kosinski, Deputy District Director
Division of Environmental Planning
Caltrans District 7
100 South Main St., Suite 100, MS-16A
Los Angeles, CA 90012

Comments may also be submitted electronically to the following email address: Ron.Kosinski@dot.ca.gov.

If you have any questions, please contact Ron Kosinski at (213) 507-4301. Thank you for your interest in this important transportation project.

Sincerely,

Gloria Roberts (Sep 29, 2022 04:41 PDT)

GLORIA H. ROBERTS
Acting District Director

"Provide a safe and reliable transportation network that serves all people and respects the environment"

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS-16A
LOS ANGELES, CA 90012
PHONE (213) 897-3656
FAX (213) 897-0360
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

September 30, 2022

Agencies, Organizations, and Individuals Interested in the San Gabriel River Bridge Rail Upgrade and Widening Project

File: EA 07-32090
EFIS: 0716000043
LA-01, PM 0.04

Notice of Intent (NOI) to Adopt a Negative Declaration and Notice of Availability (NOA) of an Environmental Assessment for the San Gabriel River Bridge Rail Upgrade and Widening Project

The California Department of Transportation (Caltrans) has completed the Initial Study with proposed Negative Declaration/Environmental Assessment (IS/EA) and Section 4(f) Evaluation for the San Gabriel River Bridge Rail Upgrade and Widening Project (Br. No. 53-0060). The proposed project would upgrade the existing bridge railing with a California Coastal Commission approved bridge railing type and widen the bridge to current design standards. The bridge is located over the San Gabriel River Channel in the City of Long Beach on State Route 1 (SR-1) at Post Mile (PM) 0.04. The project aims to improve mobility and enhance traffic safety for all users. The project would incorporate active transportation (Complete Streets) elements and fulfill Americans with Disabilities Act (ADA) requirements. The IS/EA provides information on the proposed Build Alternatives.

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- Brewitt Neighborhood Library, 4036 E Anaheim St., Long Beach, CA 90804
- OC Library - Seal Beach Branch, 707 Electric Ave., Seal Beach, CA 90740
- Caltrans, District 7, 100 S. Main Street, Los Angeles, CA 90012

Technical Studies in support of the IS/EA and printed copies of the aforementioned documents are available upon request.

The Draft IS/EA may also be viewed online at https://dot.ca.gov/caltrans-near-me/district-7/district-7-programs/d7-environmental-docs or via the CEQAnet web portal at https://ceqanet.opr.ca.gov/.

A public hearing is not being planned at this time but will be provided upon request. If you would like a public hearing, please submit your request to Karl Price at the physical or email address below no later than October 20, 2022.

Caltrans invites public comment on the Draft IS/EA and Section (4f) Evaluation in response to this NOI/NOA. A 30-day comment period will begin on October 6, 2022 and end on November 4, 2022.

Please send your comments by mail to:

Karl Price, Senior Environmental Planner
Division of Environmental Planning
Caltrans District 7
100 South Main St., Suite 100, MS-16A
Los Angeles, CA 90012

Comments may also be submitted electronically to the following email address: Karl.Price@dot.ca.gov.

If you have any questions, please contact Karl Price at (213) 266-3822. Thank you for your interest in this important transportation project.

Sincerely,

Ronald Kosinski
Deputy District Director, Division of Environmental Planning
California Department of Transportation, District 7

"Provide a safe and reliable transportation network that serves all people and respects the environment"

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PROOF OF PUBLICATION
(2015.5 C.C.P.)

STATE OF CALIFORNIA
County of Los Angeles

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principle clerk of the printer of the Long Beach Press-Telegram, a newspaper of general circulation, printed and published daily in the City of Long Beach, County of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of County of Los Angeles, State of California, on the date of March 21, 1934, Case Number 370512. The notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

10/06/2022

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Executed at Long Beach, LA Co. California,
this 6th day of October, 2022.

Signature

The Long Beach Press-Telegram, a newspaper of general circulation, is delivered to and available in but not limited to the following cities: Long Beach, Lakewood, Bellflower, Cerritos, Downey, Norwalk, Artesia, Paramount, Wilmington, Compton, South Gate, Los Alamitos, Seal Beach, Cypress, La Palma, Lynwood, San Pedro, Hawaiian

1

Public Notice

Notice of Availability (NOA)
Initial Study/Environmental Assessment w/Section 4(f) Evaluation and opportunity for Public Hearing

San Gabriel River Bridge Rail Upgrade and Widening Project on State Route 1

What is Being Planned? The California Department of Transportation (Caltrans) proposes to upgrade the existing State Route 1 (SR-1)/ San Gabriel River Bridge rating (Bridge No. 53-0080) and widen the bridge to current standards. The bridge is in the City of Long Beach near the border with the City of Seal Beach. The Project is located on SR-1 at Post Mile (PM) 0.04.

Why This Notice? Caltrans has studied the effect the project may have on the environment and has prepared an Initial Study/ Environmental Assessment (IS/EA) with Proposed Negative Declaration/ Finding of No Significant Impact (ND/ FONSI) for compliance with the California Environmental Quality Act and the National Environmental Policy Act. The purpose of this notice is to inform the public of the availability of the IS/EA and proposed ND/ FONSI, and to provide the public an opportunity to comment on the Project or request a public hearing.

What's Available? The IS/EA is available for viewing and download at: https://dot.ca.gov/caltrans-near-me/district-7/district-7-programs/d7-environmental-docs and the CEQAnet web portal at https://ceqanet.opr.ca.gov/

The IS/EA is also available to read at the following locations during regular business hours:

Bay Shore Neighborhood Library,
195 Bay Shore Ave.,
Long Beach, CA 90803
Los Altos Neighborhood Library,
5614 E Britton Dr.,
Long Beach, CA 90815
Brewitt Neighborhood Library,
4036 E Anaheim St.,
Long Beach, CA 90804
OC Library - Seal Beach Branch,
707 Electric Ave.,
Seal Beach, CA 90740
Caltrans, District 7,
100 S. Main Street,
Los Angeles, CA 90012

Technical studies in support of the IS/EA and printed copies of the aforementioned documents are available upon request.

Where You Come In. Caltrans is currently soliciting written comments from all pertinent public agencies, private entities, and interested/affected individuals regarding the environmental issues analyzed in the IS/EA. We would like your input.

Please submit written comments on the Project no later than **November 4, 2022** to:

Karl Price, Senior Environmental Planner
Caltrans District 7, Division of Environmental Planning
100 South Main Street, MS-16A

Would you like a public hearing? If so, please submit your request for a public hearing no later than **October 20, 2022.** Due to circumstances related to the COVID-19 pandemic, if requested, a virtual public hearing may be held.

Contact
If you have any questions or would like additional information, please contact: Karl Price, Senior Environmental Planner, Caltrans District 7, at karl.price@dot.ca.gov or (213) 288-3822.

2

PROOF OF PUBLICATION
(2015.5C.C.P)

La Opinión

PO Box 71847, **Los Angeles, CA 90071** Tel: (213)896-2260 • Fax: (213)896-2260

STATE OF CALIFORNIA

I am a citizen of the United States and a resident of the county aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of La Opinión a newspaper of general circulation, printed and published daily in the city of Los Angeles, county of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, under the date of July 28, 1969, Case Number: 950176; that the notice, of which the annexed is a printed copy, has been published in each regular and not in any supplement thereof on the following dates, to wit:

October 06

all in the year 2022

I certified (or declared) under penalty of perjury that the foregoing is true and correct.
Dated at Los Angeles, California, this

11 day of October, 2022

Rosa Berumen
Signature

IMO #017 Committed
Rev 03/12

This space is for the County Clerk's filing Stamp

Proof of publication:

Aviso Público
Aviso de Disponibilidad (NOA)
Estudio Inicial/Evaluación Ambiental c/Sección 4(f) Evaluación y oportunidad de Audiencia Pública

Proyecto de Mejora y Ampliación del Ferrocarril del Puente del Río en la Ruta Estatal 1

Caltrans

El IS/EA también está disponible para consulta en las siguientes ubicaciones durante el horario comercial habitual:

Biblioteca del Vecindario de Bay Shore, 195 Bay Shore Ave., Long Beach, CA 90803

Biblioteca OC - Sucursal Seal Beach, 707 Electric Ave., Seal Beach, CA 90740

Biblioteca de Vecindario de Los Altos, 5614 E Britton Dr., Long Beach, CA 90815

Caltrans, Distrito 7, 100 S. Main Street, Los Angeles, CA 90012

Biblioteca de Vecindario de Brewitt, 4036 E Anaheim St., Long Beach, CA 90804

¿Qué está siendo planeado? El Departamento de Transporte de California (Caltrans) propone mejorar la tolerancia a sísmica de la Ruta Estatal 1 (SR-1)/Puente Río San Gabriel (Bridge No. 53-0060) y ampliar el puente a los estándares actuales. El puente está en la Ciudad de Long Beach, cerca de la frontera con la Ciudad de Seal Beach. El Proyecto está ubicado en SR-1 en el Post de Milla (PM) 0.04.

¿Por qué este Aviso? Caltrans ha estudiado el efecto que el proyecto pueda tener sobre el medio ambiente y ha preparado un Estudio Inicial/Evaluación Ambiental (IS/EA) con la Propuesta de Declaración Negativa/Hallazgo de Impacto No Significativo (ND/FONSI) para cumplir con la Ley de Calidad Ambiental de California y la Ley Nacional de Política Ambiental. El propósito de este aviso es informar al público de la disponibilidad del IS/EA y el ND/FONSI propuesto, y brindar la oportunidad de comentar sobre el Proyecto o solicitar una audiencia pública.

¿Qué hay Disponible? El IS/EA está disponible para ver y descargar en: https://dot.ca.gov/caltrans-near-me/district-7/district-7-programs/d7-environmental-docs y en el portal de internet CEQAnet en https://ceqanet.opr.ca.gov/

El IS/EA también está disponible para consulta en las siguientes ubicaciones durante el horario comercial habitual:

Biblioteca del Vecindario de Bay Shore, 195 Bay Shore Ave., Long Beach, CA 90803

Biblioteca OC - Sucursal Seal Beach, 707 Electric Ave., Seal Beach, CA 90740

Biblioteca de Vecindario de Los Altos, 5614 E Britton Dr., Long Beach, CA 90815

Caltrans, Distrito 7, 100 S. Main Street, Los Angeles, CA 90012

Biblioteca de Vecindario de Brewitt, 4036 E Anaheim St., Long Beach, CA 90804

Los estudios técnicos en apoyo por IS/EA y las copias impresas de los documentos antes mencionados, están disponibles bajo solicitud.

¿Dónde Entra Usted? Caltrans actualmente está solicitando comentarios de todas las agencias públicas pertinentes, entidades privadas y personas interesadas/afectadas con respecto a los problemas ambientales analizados en el IS/EA. Nos gustaría su opinión.

Por favor envíe sus comentarios por escrito sobre el Proyecto a más tardar el 4 de noviembre de 2022 a:

Karl Price, Planificador Ambiental Senior
Caltrans Distrito 7, División de Planificación Ambiental 100 South Main Street, MS-16A
Los Angeles, CA 90012

O por correo electrónico a: karl.price@dot.ca.gov

¿Le gustaría una audiencia pública? De ser así, envíe su solicitud para una audiencia pública a más tardar el **20 de octubre de 2022.** Debido a circunstancias relacionadas con la pandemia del COVID-19, si se solicita, una audiencia pública virtual puede realizarse.

Contacto
Si tiene alguna pregunta o desea más información adicional, comuníquese con: Karl Price, Planificador Ambiental Senior, Caltrans Distrito 7, a karl.price@dot.ca.gov o (213) 269-0922.

¡Gracias por su interés en este importante Proyecto de Transporte!

28 | La Opinión JUEVES 6 OCTUBRE 2022

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Aviso de Disponibilidad (NOA)
Estudio Inicial/Evaluación Ambiental c/Dección 4(f) Evaluación y oportunidad de Audiencia Pública

Proyecto de Mejora y Ampliación del Ferrocarril del Puente del Río en la Ruta Estatal 1

¿Qué está siendo planeado? El Departamento de Transporte de California (Caltrans) propone mejorar la banadilla exterior de la Ruta Estatal 1 (SR-1)/Puente Río San Gabriel (Bridge No. 53-0580) y ampliar el puente a los estánderes actuales. El puente está en la Ciudad de Long Beach, cerca de la frontera con la Ciudad de Seal Beach. El Proyecto está ubicado en SR-1 en el Poste de Milaje (PM) 0.04.

¿Por qué este Aviso? Caltrans ha estudiado el efecto que el proyecto pueda tener sobre el medio ambiente y ha preparado un Estudio Inicial/Evaluación Ambiental (IS/EA) con la Propuesta de Declaración Negativa/Hallazgo de Impacto No Significativo (ND/FONSI) para cumplir con la Ley de Calidad Ambiental de California y la Ley Nacional de Política Ambiental. El propósito de este aviso es informar al público de la disponibilidad del IS/EA y el ND/FONSI propuesto, y brindar la oportunidad de comentar sobre el Proyecto o solicitar una audiencia pública.

¿Qué hay Disponible? El IS/EA está disponible para ver y descargar en: https://dot.ca.gov/caltrans-near-me/district-7/district-7-programs/d7-environmental-docs y en el portal de Internet CEQAnet en https://ceqanet.opr.ca.gov/

El IS/EA también está disponible para consulta en las siguientes ubicaciones durante el horario comercial habitual:

Biblioteca del Vecindario de Bay Shore, 195 Bay Shore Ave., Long Beach, CA 90803
Biblioteca de Vecindario de Los Altos, 5614 E Britton Dr., Long Beach, CA 90815
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Biblioteca OC - Sucursal Seal Beach, 707 Electric Ave., Seal Beach, CA 90740
Caltrans, Distrito 7, 100 S. Main Street, Los Angeles, CA 90012

Los estados técnicos en apoyo del IS/EA y las copias impresas de los documentos antes mencionados, están disponibles bajo solicitud.

¿Dónde Entra Usted? Caltrans actualmente está solicitando comentarios de todas las agencias públicas pertinentes, entidades privadas y personas interesadas/afectadas con respecto a los problemas ambientales analizados en el IS/EA. Nos gustaría su opinión.

Por favor envíe sus comentarios por escrito sobre el Proyecto a más tardar el 4 de noviembre de 2022 a:

Karl Price, Planificador Ambiental Senior
Caltrans Distrito 7, División de Planificación Ambiental 100 South Main Street, MS-16A
Los Angeles, CA 90012

O por correo electrónico a: karl.price@dot.ca.gov

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Contacto
Si tiene alguna pregunta o le gustaría información adicional, comuníquese con: Karl Price, Planificador Ambiental Senior, Caltrans Distrito 7, a karl.price@dot.ca.gov o (213) 266-3622.

¡Gracias por su interés en este importante Proyecto de transporte!

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Clasificados!

La Opinión
laopinion.com

CLASIFICADOS

AVISO IMPORTANTE

En observación del Día de la Raza, nuestra oficina estará cerrada el LUNES, 10 DE OCTUBRE, 2022.
Nuestras fechas y horas límites para publicar su anuncio serán las siguientes:

FECHA DE PUBLICACIÓN	FECHA Y HORA LIMITE
Domingo, 09 de octubre	Viernes, 7 de octubre @ 3:00PM
Lunes, 10 de octubre	Viernes, 7 de octubre @ 3:00PM
Martes, 11 de octubre	Viernes, 7 de octubre @ 3:00PM

PARA ANUNCIARSE LLAME AL:

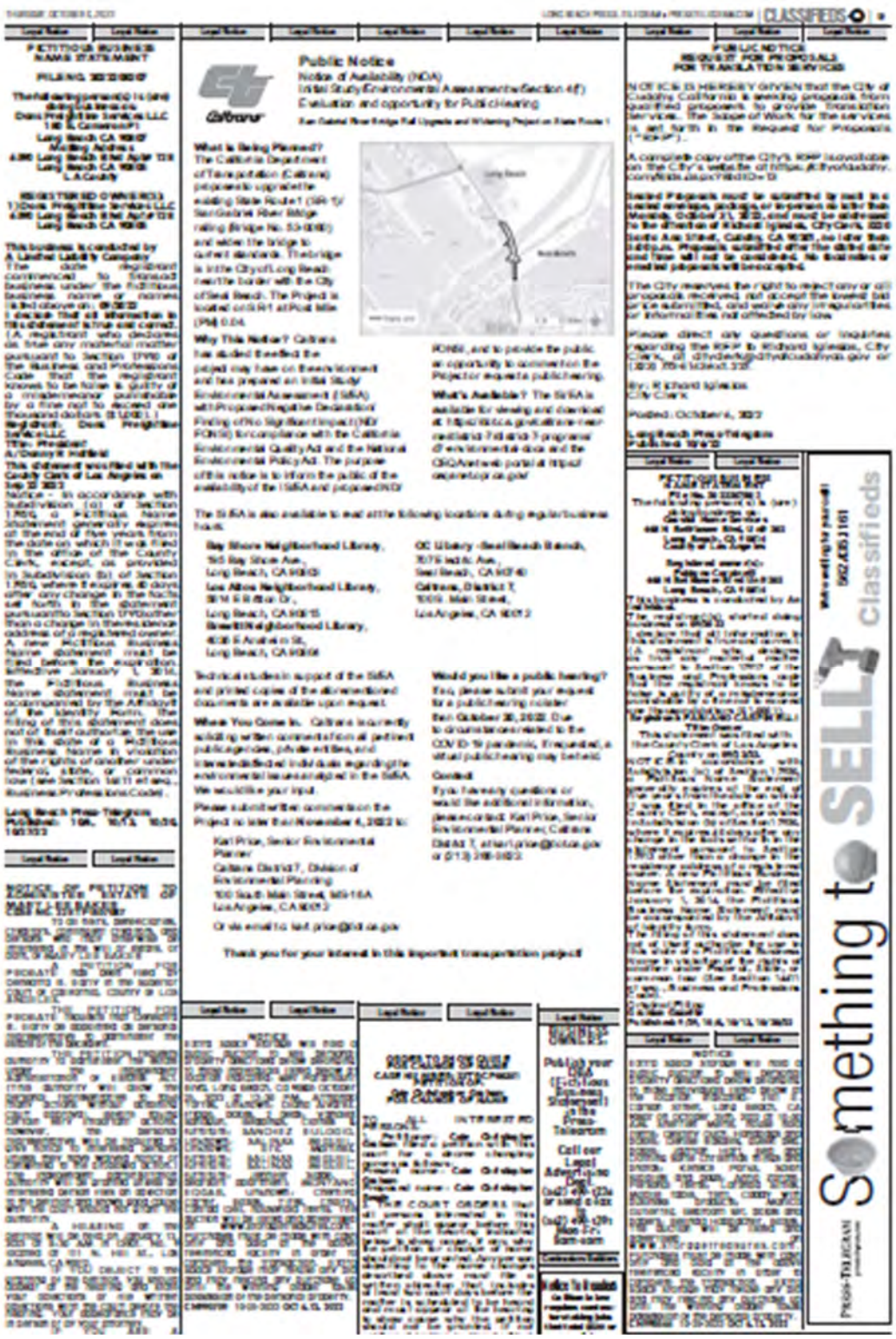
IMPORTANT NOTICE

In observance of INDIGENOUS PEOPLES' DAY, our office will be closed on MONDAY, OCTOBER 10TH, 2022.
Our publication deadlines will be as follows:

DATE OF PUBLICATION:	DEADLINE
Sunday, October 9th	Friday, October 7th @ 3:00PM
Monday, October 10th	Friday, October 7th @ 3:00PM
Tuesday, October 11th	Friday, October 7th @ 3:00PM

TO PLACE AN AD CALL TOLL FREE AT:

1-800-626-8332
laopinion.com/clasificados



Public Notice

Notice of Availability (NOA)
Initial Study/Environmental Assessment/Section 4(f) Evaluation and opportunity for Public Hearing

What is Being Planned?

Why This Notice?

What's Available?

Would you like a public hearing?

Where You Come In.

Please submit written comments on the Project no later than November 4, 2022 to:

Thank you for your interest in this important transportation project!

PUBLIC NOTICE
REQUEST FOR PROPOSALS
FOR TRANSLATION SERVICES

Public Hearings

Something to SELL? classifieds

AFFP
123684 Caltrans NOA

Affidavit of Publication

STATE OF CALIFORNIA) SS
COUNTY OF ORANGE)

I am a citizen of the United States; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principle clerk of the printer of SEAL BEACH SUN, a newspaper of general circulation, published ONCE WEEKLY in the city of SEAL BEACH, County of ORANGE, which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of ORANGE, State of California under the date of June 03, 1993, Case Number A-82583; that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

October 06, 2022

That said newspaper was regularly issued and circulated on those dates.
SIGNED:

Seal Beach Sun

Subscribed to and sworn by me this 6th day of October 2022.

00006422 00123684

SB-PPR PREPAID LEGALS SERV.
216 MAIN STREET
SEAL BEACH, CA 90740

Public Notice
Notice of Availability (NOA)
Initial Study/Environmental Assessment w/Section 4(f) Evaluation and opportunity for Public Hearing
San Gabriel River Bridge Rail Upgrade and Widening Project on State Route 1

What is Being Planned? The California Department of Transportation (Caltrans) proposes to upgrade the existing State Route 1 (SR-1)/San Gabriel River Bridge railing (Bridge No. 53-0260) and widen the bridge to current standards. The bridge is in the City of Long Beach near the border with the City of Seal Beach. The Project is located on SR-1 at Post Mile (PM) 0.04.

Why This Notice? Caltrans has studied the effect the project may have on the environment and has prepared an Initial Study/Environmental Assessment (IS/EA) with Proposed Negative Declaration/Finding of No Significant Impact (ND/FONSI) for compliance with the California Environmental Quality Act and the National Environmental Policy Act. The purpose of this notice is to inform the public of the availability of the IS/EA and proposed ND/FONSI, and to provide the public an opportunity to comment on the Project or request a public hearing.

What's Available? The IS/EA is available for viewing and download at: https://dot.ca.gov/caltrans-near-me/district-7/district-7-programs/d7-environmental-docs and the CEQAnet web portal at: https://ceqanet.opr.ca.gov/

The IS/EA is also available to read at the following locations during regular business hours:

Bay Shore Neighborhood Library
195 Bay Shore Ave.,
Long Beach, CA 90803

OC Library - Seal Beach Branch
707 Electric Ave,
Seal Beach, CA 90740

Los Altos Neighborhood Library
5614 E Britton Dr.,
Long Beach, CA 90815

Caltrans, District 7
100 S. Main Street,
Los Angeles, CA 90012

Powell Neighborhood Library
7339 E Anaheim St.,
Long Beach, CA 90804

Technical studies in support of the IS/EA and printed copies of the aforementioned documents are available upon request.

Where You Come In. Caltrans is currently soliciting written comments from all pertinent public agencies, private entities, and interested/affected individuals regarding the environmental issues analyzed in the IS/EA. We would like your input.

Please submit written comments on the Project no later than **November 4, 2022** to:

Kari Price, Senior Environmental Planner
Caltrans District 7, Division of Environmental Planning
100 South Main Street, MS-16A
Los Angeles, CA 90012

Or via email to: kari.price@dot.ca.gov

Would you like a public hearing? If so, please submit your request for a public hearing no later than **October 20, 2022**. Due to circumstances related to the COVID-19 pandemic, if requested, a virtual public hearing may be held.

Contact
If you have any questions or would like additional information, please contact: Kari Price, Senior Environmental Planner, Caltrans District 7, at kari.price@dot.ca.gov or (213) 269-0022.

Thank you for your interest in this important transportation project!

Legals-SB

ON. I declare that all information in this statement is true and correct. (A registrant who declares as true information which he or she knows to be false is guilty of a crime.) This statement was filed with the County Clerk of Orange County on 9/13/2022.
Seal Beach Sun 9/22,29,10/6,13/2022-123120

FICTITIOUS BUSINESS NAME STATEMENT NO: 2022643437
DOMENICO'S ON THE LAKE, 27782 VISTA DEL LAGO C26, MISSION VIEJO, CA 92692. County: Orange. This is a New Statement. Registrant(s): DOMENICO'S MISSION VIEJO, INC, 27782 VISTA DEL LAGO, MISSION VIEJO, CA 92692. Have you started doing business yet? YES, 09/07/2021. This business is conducted by: CORPORATION. Registrant /s/ MIKE RHODES, PRESIDENT. I declare that all information in this statement is true and correct. (A registrant who declares as true information which he or she knows to be false is guilty of a crime.) This statement was filed with the County Clerk of Orange County on 9/06/2022.
Seal Beach Sun 9/22,29,10/6,13/2022-123121

ORDER TO SHOW CAUSE FOR CHANGE OF NAME CASE NO. 30-2022-01281292
TO ALL INTERESTED PERSONS: Petitioner: SKI JOAN filed a petition with this court for a decree changing names as follows: SKI JOAN to SKY TAKEMOTO. The Court orders that all persons interested in this matter shall appear before this court at the hearing indicated below to show cause, if any, why the petition for change of name should not be granted. Any person objecting to the name changes described above must file a written objection that includes the reasons for the objection at least two court days before the matter is scheduled to be heard and must appear at the hearing to show cause why the petition should not be granted. If no written objection is timely filed, the court may grant the petition without a hearing.
NOTICE OF HEARING
12/01/2022 at 8:30 a.m.
Dept: D-100 REMOTE
Central Justice Center
700 Civic Central Drive West.
Santa Ana, CA 92701
A copy of this Order to Show Cause shall be published at least once each week for four successive weeks prior to the date set for hearing on the petition in the following:
Huntington Harbour Sun Journal
DATE: 09/20/2022
Judge Layne H. Melzer
Judge of the Superior Court
Huntington Harbour Sun Journal 9/29,10/6,13,20/22-123305

NOTICE OF PETITION TO ADMINISTER ESTATE OF: JAMES D. PORTER CASE NO. 30-2022-01279798-PR-PW-CJC
To all heirs, beneficiaries, creditors, contingent creditors, and persons who may otherwise be interested in the WILL or estate, or both of JAMES D. PORTER.

Legals-SB

A PETITION FOR PROBATE has been filed by HERBERT P. PORTER in the Superior Court of California, County of ORANGE.
THE PETITION FOR PROBATE requests that HERBERT P. PORTER be appointed as personal representative to administer the estate of the decedent.
THE PETITION requests the decedent's WILL and codicils, if any, be admitted to probate. The WILL and any codicils are available for examination in the file kept by the court.
THE PETITION requests authority to administer the estate under the Independent Administration of Estates Act with limited authority. (This authority will allow the personal representative to take many actions without obtaining court approval. Before taking certain very important actions, however, the personal representative will be required to give notice to interested persons unless they have waived notice or consented to the proposed action.) The independent administration authority will be granted unless an interested person files an objection to the petition and shows good cause why the court should not grant the authority.
A HEARING on the petition will be held in this court as follows: 11/03/22 at 1:30PM in Dept. C08 located at 700 CIVIC CENTER DRIVE WEST, SANTA ANA, CA 92701
NOTICE IN PROBATE CASES
The court is providing the convenience to appear for hearing by video using the court's designated video platform. This is a no cost service to the public. Go to the Court's website at The Superior Court of California - County of Orange (occourts.org) to appear remotely for Probate hearings and for remote hearing instructions. If you have difficulty connecting or are unable to connect to your remote hearing, call 657-622-8278 for assistance. If you prefer to appear in-person, you can appear in the department on the day/time set for your hearing.
IF YOU OBJECT to the granting of the petition, you should appear at the hearing and state your objections or file written objections with the court before the hearing. Your appearance may be in person or by your attorney.
IF YOU ARE A CREDITOR or a contingent creditor of the decedent, you must file your claim with the court and mail a copy to the personal representative appointed by the court within the later of either (1) four months from the date of first issuance of letters to a general personal representative, as defined in section 58(b) of the California Probate Code, or (2) 60 days from the date of mailing or personal delivery to you of a notice under section 9052 of the California Probate Code.
Other California statutes and legal authority may affect your rights as a creditor. You may want to consult with an attorney knowledgeable in California law.
YOU MAY EXAMINE the file kept by the court. If you are a person interested in the estate, you may file with the court a Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.
Attorney for Petitioner
THOMAS L. MCKENZIE - SBN 169103, LAW OFFICES OF THOMAS MCKENZIE
2631 COPA DE ORO DRIVE
LOS ALAMITOS CA 90720
9/22, 9/29, 10/6/22
CNS-3625482#
SEAL BEACH SUN
Seal Beach Sun 9/22,29,10/6/22-123152

FICTITIOUS BUSINESS NAME STATEMENT NO: 2022644284
T. MICHAEL STUART REAL ESTATE, 17011 BEACH BLVD., SUITE 900, HUNTINGTON BEACH, CA 92647. County: Orange. This is a New Statement. Registrant(s): TIMOTHY STUART, 17011 BEACH BLVD., SUITE 900, HUNTINGTON BEACH, CA 92647. Have you started doing business yet? NO. This business is conducted by: INDIVIDUAL. Registrant /s/ TIMOTHY STUART. I declare that all information in this statement is true and correct. (A registrant who declares as true information which he or she knows to be false is guilty of a crime.) This statement was filed with the County Clerk of Orange County on 9/14/2022.
Seal Beach Sun 9/22,29,10/6,13/2022-123163

FICTITIOUS BUSINESS NAME STATEMENT NO: 2022644396
NEWLAND LANDSCAPE, INC., 26092 TALEGA AVENUE, LAGUNA HILLS, CA 92653. County: Orange. This is a New Statement. Registrant(s): NEWLAND LANDSCAPE, INC, 26092 TALEGA AVENUE, LAGUNA HILLS, CA 92653. Have you started doing business yet? YES, 09/05/2007. This business is conducted by: CORPORATION. Registrant /s/ ROLANDO RODRIGUEZ CAMARENA, PRESIDENT. I declare that all information in this statement is true and correct. (A registrant who declares as true information which he or she knows to be false is guilty of a crime.) This statement was filed with the County Clerk of Orange County on 9/15/2022.
Seal Beach Sun 9/29,10/6,13,20/2022-123255

FICTITIOUS BUSINESS NAME STATEMENT NO: 2022643384
PASWAH PSYCHOLOGY, 9114 ADAMS AVE #589, HUNTINGTON BEACH, CA 92646. County: Orange. This is a New Statement. Registrant(s): KATHERINE COURTNEY, 8161 CAPE HOPE CIR UNIT 202, HUNTINGTON BEACH, CA 92646. Have you started doing business yet? YES, 08/15/2022. This business is conducted by: INDIVIDUAL. Registrant /s/ KATHERINE COURTNEY. I declare that all information in this statement is true and correct. (A registrant who declares as true information which he or she knows to be false is guilty of a crime.) This statement was filed with the County Clerk of Orange County on 9/02/2022.
Seal Beach Sun 9/29,10/6,13,20/2022-123256

APN: 108-064-47 TS No:

Legals-SB

CA07000879-21-1 TO No: 210888993-CA-VOI NOTICE OF TRUSTEE'S SALE (The above statement is made pursuant to CA Civil Code Section 2923.3(d)(1). The Summary will be provided to Trustor(s) and/or vested owner(s) only, pursuant to CA Civil Code Section 2923.3(d)(2).) YOU ARE IN DEFAULT UNDER A DEED OF TRUST DATED June 23, 2015. UNLESS YOU TAKE ACTION TO PROTECT YOUR PROPERTY, IT MAY BE SOLD AT A PUBLIC SALE. IF YOU NEED AN EXPLANATION OF THE NATURE OF THE PROCEEDINGS AGAINST YOU, YOU SHOULD CONTACT A LAWYER. On October 31, 2022 at 09:00 AM, Auction.com Room, Doubletree by Hilton Hotel Anaheim - Orange County, 100 The City Drive, Orange, CA 92868, MTC Financial Inc. dba Trustee Corps, as the duly Appointed Trustee, under and pursuant to the power of sale contained in that certain Deed of Trust Recorded on June 30, 2015 as Instrument No. 2015000342446, and that said Deed of Trust was modified by Modification Agreement and recorded April 9, 2019 as Instrument Number 2019000111796, of official records in the Office of the Recorder of Orange County, California, executed by CHRISTOPHER J. THOMAS, A SINGLE MAN AND MICHELLE K. NGUYEN, A SINGLE WOMAN, AS JOINT TENANTS , as Trustor(s), in favor of MORTGAGE ELECTRONIC REGISTRATION SYSTEMS, INC., as Beneficiary, as nominee for LAND HOME FINANCIAL SERVICES, INC as Beneficiary WILL SELL AT PUBLIC AUCTION TO THE HIGHEST BIDDER, in lawful money of the United States, all payable at the time of sale, that certain property situated in said County, California describing the land therein as: AS MORE FULLY DESCRIBED IN SAID DEED OF TRUST The property heretofore described is being sold "as is". The street address and other common designation, if any, of the real property described above is purported to be: 10757 COBALT COURT, FOUNTAIN VALLEY, CA 92708 The undersigned Trustee disclaims any liability for any incorrectness of the street address and other common designation, if any, shown herein. Said sale will be made without covenant or warranty, express or implied, regarding title, possession, or encumbrances, to pay the remaining principal sum of the Note(s) secured by said Deed of Trust, with interest thereon, as provided in said Note(s), advances if any, under the terms of the Deed of Trust, estimated fees, charges and expenses of the Trustee and of the trusts created by said Deed of Trust. The total amount of the unpaid balance of the obligations secured by the property to be sold and reasonable estimated costs, expenses and advances at the time of the initial publication of this Notice of Trustee's Sale is estimated to be $271,316.16 (Estimated). However, prepayment premiums, accrued interest and advances will increase this figure prior to sale. Beneficiary's bid at said sale may include all or part of said amount. In addition to cash, the Trustee will accept a cashier's check drawn on a state or national bank, a check drawn by a state or federal credit union or a check drawn by a state or federal savings and loan association, savings association or savings bank specified in Section 5102 of the California Financial Code and authorized to do business in California, or other such funds as may be acceptable to the Trustee. In the event tender other than cash is accepted, the Trustee may withhold the issuance of the Trustee's Deed Upon Sale until funds become available to the payee or endorsee as a matter of right. The property offered for sale excludes all funds held on account by the property receiver, if applicable. If the Trustee is unable to convey title for any reason, the successful bidder's sole and exclusive remedy shall be the return of monies paid to the Trustee and the successful bidder shall have no further recourse. Notice to Potential Bidders If you are considering bidding on this property lien, you should understand that there are risks involved in bidding at a Trustee auction. You will be bidding on a lien, not on the property itself. Placing the highest bid at a Trustee auction does not automatically entitle you to free and clear ownership of the property. You should also be aware that the lien being auctioned off may be a junior lien. If you are the highest bidder at the auction, you are or may be responsible for paying off all liens senior to the lien being auctioned off, before you can receive clear title to the property. You are encouraged to investigate the existence, priority, and size of outstanding liens that may exist on this property by contacting the county recorder's office or a title insurance company, either of which may charge you a fee for this information. If you consult either of these resources, you should be aware that the same Lender may hold more than one mortgage or Deed of Trust on the property. Notice to Property Owner The sale date shown on this Notice of Sale may be postponed one or more times by the Mortgagee, Beneficiary, Trustee, or a court, pursuant to Section 2924g of the California Civil Code. The law requires that information about Trustee Sale postponements be made available to you and to the public, as a courtesy to those not present at the sale. If you wish to learn whether your sale date has been postponed, and, if applicable, the rescheduled time and date for the sale of this property, you may call Auction.com at 800.280.2832 for information regarding the Trustee's Sale or visit the Internet Website address www.Auction.com for information regarding the sale of this property, using the file number assigned to this case, CA07000879-21-1. Information about postponements that are very short in duration or that occur close in time to the scheduled sale may not immediately be reflected in the telephone information or on the Internet Website. The best way to verify postponement information is to attend the scheduled sale. Notice to Tenant NOTICE TO TENANT FOR FORECLOSURES AFTER JANUARY 1, 2021 You may have a right to purchase this property after the trustee auction pursuant to Section 2924m of the California Civil Code. If you are an "eligible tenant buyer," you can purchase the property if you match the last and highest bid placed at the trustee auction. If you are an "eligible bidder," you may be able to purchase the property if you exceed the last and highest bid placed at the trustee auction. There are three steps to exercising this right of purchase. First, 48 hours after the date of the trustee sale, you can call 800.280.2832, or visit this internet website www.Auction.com, using the file number assigned to this case CA07000879-21-1 to find the date on which the trustee's sale was held, the amount of the last and highest bid, and the address

Public Notice
Notice of Availability (NOA)
Initial Study/Environmental Assessment w/Section 4(f) Evaluation and opportunity for Public Hearing
San Gabriel River Bridge Rail Upgrade and Widening Project on State Route 1

What is Being Planned? The California Department of Transportation (Caltrans) proposes to upgrade the existing State Route 1 (SR-1)/San Gabriel River Bridge railing (Bridge No. 53-0060) and widen the bridge to current standards. The bridge is in the City of Long Beach near the border with the City of Seal Beach. The Project is located on SR-1 at Post Mile (PM) 0.04.

Why This Notice? Caltrans has studied the effect the project may have on the environment and has prepared an Initial Study/Environmental Assessment (IS/EA) with Proposed Negative Declaration/Finding of No Significant Impact (ND/FONSI) for compliance with the California Environmental Quality Act and the National Environmental Policy Act. The purpose of this notice is to inform the public of the availability of the IS/EA and proposed ND/FONSI, and to provide the public an opportunity to comment on the Project or request a public hearing.

What's Available? The IS/EA is available for viewing and download at: https://dot.ca.gov/caltrans-near-me/district-7/district-7-programs#d7-environmental-docs and the CEQAnet web portal at https://ceqanet.opr.ca.gov/

The IS/EA is also available to read at the following locations during regular business hours:

Bay Shore Neighborhood Library, 195 Bay Shore Ave., Long Beach, CA 90803
OC Library - Seal Beach Branch, 707 Electric Ave., Seal Beach, CA 90740
Los Altos Neighborhood Library, 5614 E Britton Dr., Long Beach, CA 90815
Caltrans, District 7, 100 S. Main Street, Los Angeles, CA 90012
Brewitt Neighborhood Library, 4036 E Anaheim St., Long Beach, CA 90804

Technical studies in support of the IS/EA and printed copies of the aforementioned documents are available upon request.

Where You Come In. Caltrans is currently soliciting written comments from all pertinent public agencies, private entities, and interested/affected individuals regarding the environmental issues analyzed in the IS/EA. We would like your input.

Please submit written comments on the Project no later than **November 4, 2022** to:

Karl Price, Senior Environmental Planner
Caltrans District 7, Division of Environmental Planning
100 South Main Street, MS-16A
Los Angeles, CA 90012

Or via email to: karl.price@dot.ca.gov

Would you like a public hearing? If so, please submit your request for a public hearing no later than **October 20, 2022**. Due to circumstances related to the COVID-19 pandemic, if requested, a virtual public hearing may be held.

Contact
If you have any questions or would like additional information, please contact: Karl Price, Senior Environmental Planner, Caltrans District 7, at karl.price@dot.ca.gov or (213) 266-3822.

Thank you for your interest in this important transportation project!

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Appendix L. Response to Comments

List of Coded Comment Letters

Code	Commenter Name	Date
State Agencies		
S-1	California Coastal Commission	November 4, 2022
S-2	California Department of Fish and Wildlife	November 14, 2022
S-3	California State Lands Commission	October 13, 2022
Local Agencies		
L-1	City of Seal Beach	October 21, 2022
Businesses and General Public		
G-1	Dee Schumacher	October 13, 2022
G-2	Steve Hargreaves	November 2, 2022

L.1 State Agencies (S Series)

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STATE OF CALIFORNIA - NATURAL RESOURCES AGENCY GAVIN NEWSOM, GOVERNOR

CALIFORNIA COASTAL COMMISSION

South Coast Office
300 Ocean Blvd. Ste. 301
Long Beach, CA 90802
(562) 590-5071

S-1

Karl Price
Senior Environmental Planner
Caltrans District 7
Division of Environmental Planning
100 South Main Street, MS 16A
Los Angeles, CA 90012

RE: PCH San Gabriel River Bridge Project (Bridge No. 53-0060) Coastal Commission Staff Comments on Initial Study with Proposed Negative Declaration/Environmental Assessment

Thank you for the opportunity to comment on the Initial Study with Proposed Negative Declaration/Environmental Assessment for the PCH San Gabriel Bridge Project (Project). The project is within the Coastal Zone and constitutes development so a coastal development permit will be required following the CEQA review phase of the project. The project is located partially within the City of Long Beach's (City) coastal development permit (CDP) jurisdiction, partially within the uncertified City of Seal Beach, and partially within the San Gabriel River, which is the Commission's retained permit jurisdiction. For the portions of the project located within the San Gabriel River and the City of Seal Beach, the development must be evaluated for consistency with the Chapter 3 policies of the Coastal Act. However, for the portion of the project located within the City of Long Beach, the policies and provisions of the City's certified Local Coastal Program, will serve as guidance in addition to Chapter 3. Due to the overlapping permitting jurisdictions within the project area, we encourage and support Caltrans effort to request consolidation from the City of Long Beach, wherein the Commission would process a consolidated CDP. S-1-1

The project description proposes to upgrade the existing San Gabriel River Bridge railing with concrete barrier Type 80SW and widen the bridge to current standards. Specifically, the stated project goal is to improve mobility and enhance traffic safety for all users by upgrading the bridge railing to a California Coastal Commission approved bridge railing and widening the existing 5-foot shoulder that serves as a bike lane to a standard 8-foot shoulder. The project would also extend the sidewalk at four corners of bridge to provide pedestrian sidewalk continuity in the areas where gaps exist and would incorporate active transportation (i.e., Complete Streets) elements and fulfill Americans with Disabilities Act (ADA) requirements.

One of the primary tenets of the Coastal Act is to preserve and enhance public access to and along the coast, as well as to reduce vehicle miles traveled and promote alternative modes of transportation. The Coastal Act also includes policies to preserve and enhance biological resources, visual resources, and to

ensure development is safe from coastal hazards[1]. The following are our comments on the Initial Study with Proposed Negative Declaration/Environmental Assessment with references to relevant sections of the Southeast Area Specific Plan (SEASP), a certified component of the City of Long Beach Local Coastal Program (LCP), which was certified on September 8, 2021.

Wetlands

Both SEASP and the Coastal Act contain policies that strictly limit development within and around coastal wetlands. Section 2.3.2 Wetlands and Other Waters of the IS/ND describes the wetland delineation requirements of the Regional Water Quality Control Board and the Army Corps of Engineers, however, there is no discussion about the Coastal Commission and SEASP requirements for wetland delineation and protection. As defined by Section 30121 of the Coastal Act, wetlands are "lands within the Coastal Zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." In addition, as defined by 14 CCR Section 13577, wetlands consist of land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. SEASP Policies 5.11 through 5.20 set forth the requirements for wetland protection and buffers. Please evaluate the project for consistency with these policies. Furthermore, section 2.3.2.2 of the IS/ND states that "the assessment of potential impacts to Wetlands and other waters is described in the Natural Environment Study (December 2021) and the Jurisdictional Delineation Report (May 2022) that were prepared for this Project by Caltrans." However, our staff has not had the opportunity to review the Natural Environment Study (NES) or the Jurisdictional Delineation Report (JDR). As noted above, please evaluate the project for consistency with the SEASP wetland policies, and send the updated NES and JDR to our staff for review when completed.

S-1-2

S-1-3

S-1-4

Public Access

On May 10, 2017, Commission staff provided comments and questions on the updated mini-preliminary environmental analysis report (mini-PEAR). In that letter, we expressed our support for widening the existing 5-foot-wide sidewalks to the current standard of six feet, filling in gaps to pedestrian access at the northern and southern bridge approaches, and widening of the bike lane to 8 feet in order to meet the current Class 2 standards and creation a 2-foot buffer for safety. We are pleased to see that these upgrades to multimodal access have been included in the latest project designs of both Alternatives 2 and 3. However, we also asked whether flexible bollards could be incorporated into the bike lane design to provide

S-1-5

[1] Our staff has provided initial guidance comments on the Sea Level Rise analysis for this project. It is our understanding that this analysis is still in progress and we look forward to reviewing the final study.

S-1-6

additional visibility and safety for cyclists, and it does not appear that this safety feature is included in the latest project design. Since CCC staff last submitted comments on this project, the SEASP was certified by the Commission in 2021. The SEASP contains specific design guidelines for Pacific Coast Highway (PCH), and Policy 7.6.2 of the SEASP envisions a "buffered bike lane" on PCH with a physical barrier separating the bike lane from the travel lane. To that end, could a physical barrier, such as flexible bollards or another similar buffer device, separating the bike lane from the travel lane be incorporated into the project design and if not, why? S-1-5

Fill of Coastal Waters

Additionally, in CCC's 2017 comment letter, staff commented on the potential impacts to soft bottom habitat from the project's proposal to "construct a new bridge foundation and pier in the San Gabriel River Channel," which "will require pile driving 15 to 30 feet into the channel." Coastal Act Section 30233 requires that fill of coastal waters shall only be permitted where there is no feasible less damaging environmental alternative, and where feasible mitigation measures have been provided to minimize environmental effects. The IS/ND describes the subject section of the San Gabriel River as a soft bottom tidally influenced river and flood control channel. However, it appears that no habitat survey of the river bottom was conducted. Therefore, we are requesting that Caltrans survey the river bottom within the project site. S-1-7 Additionally, although the IS/ND states that 24 new concrete piles will need to be constructed, resulting in the permanent fill of .0108 acres of coastal waters, there are no mitigation measures cited in the document for these impacts. Typically, the Commission requires 3:1 mitigation for fill of coastal streams and mitigation may be required through the coastal development permit process for the proposed project depending on the findings of the river bottom habitat survey. S-1-8

Green Sea Turtle Monitoring

As noted in the IS/ND the presence of green sea turtles in the San Gabriel River is well known and documented. Mitigation measures AS-1 and AS-2 propose to monitor for green sea turtles prior to and during construction to prevent unanticipated impacts to these species, however, these measures do not specify the District Biologist's methods for monitoring. Therefore, we request that a Green Sea Turtle Monitoring and Avoidance Plan (Plan), including employee training regarding protection of these species, be developed to supplement mitigation measures AS-1 and AS-2. This plan should be provided to the Commission for review prior to project construction and should include: S-1-9

• Procedures for monitoring sea turtles, and specifications for Marine Wildlife Observers.

• Methods for communicating with contractors to stop work if there is a risk that any sea turtles active in the area may move closer to construction sites.

• Limitations that work occur only during daylight hours when visual monitoring of sea turtles can be conducted.

Tree Trimming and Removal

As stated in the IS/ND, the San Gabriel River, Los Cerritos Wetlands, and Alamitos Bay Marina areas of Long Beach and Seal Beach contain native and non-native trees that support bird nesting and foraging activities, specifically wading birds, including the great blue heron, black-crowned night heron, and snowy egret. The proposed project may require tree trimming or tree removal, which has the potential to impact nesting birds. Mitigation measure PF-BIO-1 proposes that tree trimming and removal activities occur outside of the nesting season, and if these activities must occur during the nesting season that preconstruction surveys are conducted and buffer zones are established should nesting birds be found. In order to ensure that mitigation measure PF-BIO-1 is consistent with SEASP Policies 5.30 and 5.31, we request that the text of these policies be added to the mitigation measure. These two policies require a 2:1 mitigation for the removal of any trees that support bird nesting, establish noise decibel standards for construction equipment when nesting birds are present, and include strict requirements for how/when trimming of nesting trees can occur. S-1-10

Please note that the comments provided herein are preliminary in nature. More specific comments may be provided as the project develops. Coastal Commission staff requests notification of any future activity associated with this project or related projects. Additionally, the comments contained herein are those of Coastal Commission staff only and should not be construed as representing the opinion of the Coastal Commission itself. Thank you for the opportunity to comment on the IS/ND.

Sincerely,

Jordan Sanchez
Senior Transportation Program Analyst

L.1.1 Response to Comments

Response to Comment S-1-1
Caltrans will work with the City of Long Beach Local Coastal Program (LCP) and California Coastal Commission to obtain a consolidated Coastal Development Permit.

Response to Comment S-1-2
The proposed project has been evaluated for consistency with SEASP and California Coastal Commission policies regarding wetlands. No wetlands will be affected by project construction. No construction will take place within the Los Cerritos Wetlands. Construction also will not take place directly adjacent to the freshwater pond near just south of the San Gabriel River.

Response to Comment S-1-3
The project has been evaluated for consistency with SEASP Policies 5.11 through 5.20 regarding wetland protection and buffers. The proposed project will not impact any wetlands. Best Management Practices (BMPs) will be implemented during construction.

Response to Comment S-1-4
The final Natural Environment Study (NES) and Jurisdictional Delineation Report (JDR) will be provided to the California Coastal Commission.

Response to Comment S-1-5
On April 6, 2022 a coordination meeting with the City of Long Beach was held to discuss the project improvements. The proposed project provides a 12-foot median and 8-foot-wide right shoulders (Class II bike lane), which provide adequate room to accommodate a future Class IV bike lane in lieu of a non-standard right shoulder. To review the full scope of the project, see Chapter 1 of this document.

Response to Comment S-1-6
CCC's comments on the draft study report have been taken into account and the final SLR study will be provided to the CCC staff for review as we enter the final design phase of the project.

Response to Comment S-1-7
Caltrans biologists surveyed the river bottom by SCUBA on August 17th, 2021 and found no essential fish habitat or eel grass at the channel bottom.

Response to Comment S-1-8
Caltrans anticipates utilizing an in-lieu-fee (ILF) transfer of funds to the Coastal Commission, or Local Cities such as Long Beach or Seal Beach, to mitigate for the placement of fill in coastal waters. The details of the ILF transfer will be determined during the Coastal Development Permit process. However, there is no impact to essential fish habitat, since the channel consists of open water, rip rap banks, and a denuded soft bottom. There is no eel grass or riparian vegetation within the channel in the project area, therefore, mitigation for habitat should not be required.

Response to Comment S-1-9
Monitoring for green sea turtles will be conducted by qualified biologists daily and continuously during in-water construction activities. Surveys will be conducted by kayak or SCUBA prior to dewatering the project area when the coffer dam is installed. Once the coffer dam is installed, a

full-time biological monitor will be on site to check for green sea turtles that are outside of the coffer dam.

Response to Comment S-1-10
The text of SEASP Policy 5.30 has been added to Project Feature PF-BIO-1. SEASP Policy 5.31 is not applicable, because no tree trimming or removal is proposed.

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

November 14, 2022

S-2

Karl Price
Senior Environmental Planner
California Department of Transportation
100 S. Main Street, MS-16A
Los Angeles, CA 90012
Karl.Price@dot.ca.gov

Subject: San Gabriel River Bridge Rail Upgrade and Widening, Joint Negative Declaration/Environmental Assessment, SCH #2022100105

Dear Mr. Price:

The California Department of Fish and Wildlife (CDFW) reviewed the joint Negative Declaration/Environmental Assessment (ND/EA) from the California Department of Transportation (Caltrans) for the San Gabriel River Bridge Rail Upgrade and Widening Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1] In addition, CDFW has reviewed the ND/EA's supplemental documents, which include a Natural Environmental Study (NES).

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Objective: To improve safety of the San Gabriel Bridge on State Route 1 (SR-1), Caltrans proposes to widen the bridge that crosses the San Gabriel River in the City of Long Beach. The current bridge has two 12-foot-wide travel lanes, a 5-foot-wide shoulder, and a 5-foot-wide sidewalk in each direction, along with a 2-foot-wide median. The non-standard 5-foot-wide shoulders would be increased to eight feet on each side. The Project proposes to widen the sidewalk to 8 feet on both sides of the bridge to meet current standards and to provide a more comfortable width for pedestrians. Also, the Project proposes to extend the sidewalk on the southwest side of the bridge to provide continuous sidewalk access. In addition, the Project will upgrade the existing bridge railing system for safety.

There are three alternatives proposed. Alternative 1 is the No Build Alternative. Alternative 2 proposes to widen the bridge symmetrically. Alternative 3 proposes to widen the bridge on one side only.

Build Alternative 2 would widen the bridge by 11 feet and 9 inches on each side. This would provide two standard 12-foot lanes, a standard 8-foot outside shoulder, and a standard 8-foot sidewalk in each direction with a standard 12-foot median. Widening will require the installation of 24 cast in steel shell (CISS) piles to support the widened bridge. Retaining walls would be added on the southwest end the northwest end of the Project. Approximately 190 feet of new sidewalk is proposed to provide continuity to the gap in sidewalk on the southwest end of the bridge. The bridge deck and approaches would be resurfaced, and pavement delineation would be added to accommodate the new widened bridge. The guardrail will be upgraded.

Build Alternative 2 would also include installation of four (4) access road driveway ramps – two (2) access driveway ramps to the San Gabriel River Bike Trail at the south end and two (2) access driveway ramps to the maintenance access road at the north end of the bridge. The adjoining roadway at each end of the bridge would be widened as it transitions back to the existing width of SR-1. No right of way acquisition is anticipated. However, Temporary Construction Easements (TCE) for construction staging would be required from various property owners to construct the proposed retaining wall for the transition pavement off the bridge. Two existing light poles will be relocated within Caltrans' Right-of-Way. The utilities under the existing bridge that overhang on either side of the bridge would be impacted. All other utilities would need to be protected in place. Utility relocation and coordination with utility providers is required.

Build Alternative 3 would widen the bridge by 23 feet and 6 inches on the northeast side of the bridge. This alternative would provide two standard 12-foot-wide lanes, a standard 8-foot outside shoulder, and a standard 8-foot sidewalk in each direction with a standard 12-foot median. Widening will require the installation of 24 CISS piles to support the widened bridge. A retaining wall would be added on the southeast end of the Project site. Approximately 200 feet of new sidewalk is proposed to provide continuity to the gap in sidewalk on the southwest end of the bridge. A replacement sidewalk is proposed on the northeast side until North Studebaker Road. The adjoining roadway at each end of the bridge would require widening as it transitions back to the existing width of SR-1, and the existing roadway would be realigned to accommodate the new widened bridge. New curb and gutter will be added to accommodate the roadway transition on either side of the bridge. The bridge deck and approaches would be resurfaced, and pavement delineation would be added to accommodate the new widened bridge. One ADA curb ramp would be added at the southwest corner of the SR-1 and North Studebaker Road intersection.

Build Alternative 3 would also include the installation of four access road driveway ramps – two access driveway ramps to San Gabriel River Bike Trail at the south end and two access driveway ramps to the maintenance access road at the north end of the bridge. Right of way acquisition is anticipated in addition to TCEs. TCEs for construction staging would be required from various property owners to construct the proposed retaining wall for the transition pavement off the bridge. Four existing light poles on the south side of the bridge and three existing light poles on the north side would be relocated. Utilities under the bridge that overhang on the east side of the bridge would be impacted and would have to be relocated. All other utilities would need to be protected in place. Utility relocation and coordination with utility providers is required. The existing railing would be upgraded with concrete barriers.

Location: This Project is located on SR-1 in the City of Long Beach where it crosses over the San Gabriel River in the County of Los Angeles (33.752111, -118.10625).

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Caltrans in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Comment #1: Impacts to Southern Tarplant

Issue: The Project could impact southern tarplant (*Centromadia parryi* ssp. *australis*), which has a California Rare Plant Rank (CRPR) of 1B.1.

Specific impacts: Project construction and activities involving ground disturbance, vegetation clearing, and vehicle, equipment, and foot traffic may bury, excavate, crush, trample, or disturb rare plants. Soil disturbance may result in permanent loss of rare plants and rare plant seed bank. Impacts to rare plants may result in local population declines or extirpation of a species. Insufficient mitigation may result in prolonged temporal or permanent impacts to a rare plant species range, distribution, and population in the State. S-2-1

Why impacts would occur: According to page 2-159 of the ND/EA, southern tarplant was observed "growing in a small population near the northwest corner of the bridge" during an August 17, 2021 site visit. It is not evident from the ND/EA or the NES that species-specific plant surveys were conducted for southern tarplant. In order to analyze if a project may have a significant effect on the environment, the Project related impacts, including protocol survey results for CEQA-rare, SSC, or CESA-listed species that could occur in the Project footprint need to be disclosed. S-2-2

CDFW concurs with Mitigation Measure PS-2, which establishes a protective buffer around the identified population of tarplant and Mitigation Measure PS-4, which requires work to be postponed in response to observations of species of concern during any phase of construction. However, S-2-3

Mitigation Measure PS-3 states that a qualified botanist should relocate any sensitive plant species observed within the Project footprint. Rare plant relocation should not be considered as a measure to mitigate for impacts to rare plants below a significant level under CEQA (Fiedler 1991; Fahselt 2007; Godefroid 2010). Studies have shown that these efforts are experimental and the outcome unreliable (CNPS 1998). Additionally, rare plants are habitat specialists that require specific habitat conditions to exist and persist. For example, they may require a particular soil type, set of pollinators, mycorrhizal fungi, associate plant species, and microclimate. Relocation of rare plants to an area not suitable to support the species may result in the mortality of rare plants and propagules. Furthermore, CDFW is concerned with translocating or moving collected seed to an undisclosed location. The biological implication of mixing genes and specific alleles into new areas S-2-4

is not supported by CDFW and may cause loss of both the transplanted species as well as the population they are being moved to/near. Conducting species-specific surveys at the appropriate time of year to determine if southern tarplant is present elsewhere in the project footprint would assist in planning for additional plant occurrences.

Evidence impact would be significant: Plants with a CRPR of 1A, 1B, 2A, and 2B are rare throughout their range, endemic to California, and are seriously or moderately threatened in California. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, as they meet the definition of rare or endangered (CEQA Guidelines, § 15380). California Native Plant Society's (CNPS) Rare Plant Ranks page includes additional rank definitions (CNPS 2020). Impacts to special status plants should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance and mitigation measures will result in the Project having a substantial adverse direct and cumulative 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 CDFW or the United States Fish and Wildlife Service. S-2-5

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends Caltrans perform at least two species specific surveys at the peak and near the end of flowering season for southern tarplant within the Project footprint. Focused surveys should be conducted according to CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Species-specific surveys would allow for identification of any areas where these species occur and if possible, how these areas/impacts may be avoided, as well as inform appropriate minimization and mitigation measures. S-2-6

Mitigation Measure #2: CDFW recommends a summary of survey methods, including negative findings, be provided in the CEQA document, and a full survey report provided as an Appendix. If southern tarplant is found, CDFW recommends the document include a detailed map in to show the location of individual plants or populations, and number of plants or density of plants per square feet occurring at each location. A complete survey report should provide the following information:

a) A description and map of the survey area;
b) Field survey conditions that should include name(s) of qualified biologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched;
c) If a qualified biologist does not find southern tarplant, provide a detailed discussion to support how this determination was made;
d) If southern tarplant is found, provide a map showing the location of individual plants or populations, and number of plants or density of plants per square feet occurring at each location. Use appropriate symbology, text boxes, and other map elements to show and distinguish between species found and which plants/populations will be avoided versus impacted by Project construction and activities that would require mitigation; and
e) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where southern tarplant was found. S-2-7

Mitigation Measure #3: If avoidance of southern tarplant, a CRPR 1 plant, is not feasible, the Project shall compensate for the loss of the species to ensure that there is no net loss of the species. Caltrans shall provide adequate analysis ensuring no net loss with proposed S-2-8

compensation. A plan for mitigation shall be fully developed and executed prior to Project construction. S-2-8

A restoration plan should be prepared by a qualified botanist and/or restoration specialist and include the following information: a) the specific location of restoration sites and assessment of reference sites; b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; c) a schematic depicting the mitigation area; d) a local seed and cuttings and planting schedule; e) a description of the irrigation methodology; f) measures to control exotic vegetation on site; g) specific success criteria; h) a detailed monitoring program; and i) contingency measures should the success criteria and providing for conservation of the mitigation on site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought. S-2-9

Mitigation Measure #4: After construction activities, temporary fencing should be removed in phases depending on construction progress and replaced with permanent fencing to preserve rare plants and habitat. S-2-10

Comment #2: Impacts Green Sea Turtle

Issue: The Project may impact green sea turtle (*Chelonia mydas*), which is listed as threatened under the Endangered Species Act (ESA). S-2-11

Specific impact: Green sea turtles that utilize the San Gabriel River may be affected by Project activities during in-stream construction. Also, in-stream construction may result in impacts to eelgrass downstream. S-2-12

Why impacts would occur: According to page 36 of the NES, green sea turtles are expected to occur at the Project site. According to page 2-93 of the ND/EA, the build alternatives propose to install 24 CISS piles in the channel. Page 2-169 of the ND/EA states that the Project "may affect not likely to adversely affect the seasonal foraging of green sea turtles in the San Gabriel River Channel." However, in channel work will impact the behavior of green sea turtles that use the San Gabriel River. In addition, the installation of CISS piles require pile driving that may impact sea turtles with high intensity sound waves and vibrations. Therefore, CDFW is concerned that impacts from placing CISS piles in the stream channel were not adequately assessed and addressed. S-2-13

CDFW concurs with Mitigation Measure TE-3 which requires a District Biologist to survey prior to commencement of construction. CDFW also concurs with Mitigation Measure TE-1 which requires a biologist to monitor for green sea turtles during Project activities. However, daily monitoring may not prevent unanticipated impacts to these species. S-2-14

Evidence impacts would be significant: CEQA Guidelines section 15380 defines rare, threatened, and endangered species. Impacts to rare, threatened, and endangered species must be evaluated under CEQA. Project construction and activities may result in impacts to green sea turtle, which is listed as threatened under the ESA. Inadequate avoidance and mitigation measures will result in the Project having a substantial adverse effect on a species identified as a candidate, sensitive, or special status species by CDFW or U.S. Fish and Wildlife Service.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #5: If pile driving will occur within the channel, an underwater sound attenuation monitoring plan shall be developed. The plan should describe underwater sound S-2-15

monitoring methods and mitigation measures to avoid injurious sound pressure levels to fish, marine mammals, and sea turtles during in-water construction work. According to the Interim Criteria for Injury to Fish from Pile Driving Activities, the sound pressure levels should not exceed 206 decibels (dB) peak level, and 187 dB accumulated sound exposure level (SEL) for all listed fish except those that are less than two grams. In that case, the criteria for the accumulated SEL should be 183 dB. The NMFS Marine Mammal Acoustic Technical Guidance provides thresholds for underwater noise impacts to marine mammals. Monitoring results should be provided to CDFW and other appropriate regulatory agencies for review. S-2-15

Mitigation Measure #6: CDFW concurs with Mitigation Measures TE-3 and TE-4 proposed in the Project's CEQA document. However, CDFW recommends Caltrans revise the Mitigation Measure TE-1 by incorporating the underlined language and removing the language with strikethrough:

> "Biological monitor is needed when construction is taking place in the stream channel. ~~at Post Mile 9.04~~. The District Biologist will monitor each morning prior to the start of construction for green sea turtles and California least tern during construction to prevent unanticipated impacts to these species. If green sea turtles are present, construction should pause until they leave on their own volition." S-2-16

Comment #3: Impacts to Bats

Issue: The Project may have impacts to bats, such as Mexican free-tailed bats (*Tadarida brasiliensis*), Yuma myotis (*Myotis yumanensis*), and big brown bats (*Eptesicus fuscus*).

Specific impacts: The Project may result in direct and indirect impacts to bats. Modification of bridges and culverts where bats are roosting and removal of trees that provide bat roosting habitat can directly impact bats. Indirect impacts to bats and roosts could result from increased noise disturbances, human activity, additional artificial light, dust, vegetation clearing, ground disturbing activities (e.g., staging, access, excavation, grading), and vibrations caused by heavy equipment. S-2-17

Why impacts would occur: According to page 11 of the NES, "bridge joints, creek, perennial water supply, and insect abundance at this location provide suitable roosting and foraging habitat." Although page 2-184 of the ND/EA states, "No potential roosting within the BSA would be impacted," it is unclear how the ND/EA came to that conclusion. CDFW is concerned that widening the bridge would impact bats and their roosting habitat. Modifications to roost sites can have significant impacts on the bats' usability of the roost and can impact the bats' fitness and survivability (Johnston et al. 2004). Even if construction doesn't directly impact the bridge joints of the bridge where bats may be roosting, indirect impacts such as noise, light, and vibration may lead to the abandonment of roosts (Johnston et al. 2004). In addition, it is unclear whether the bridge supports a maternity roost of bats based on the information presented in the NES and ND/EA. Nighttime emergence surveys are required to determine if a maternity roost is present. If a maternity roost is present and construction on the bridge is required during the maternity season, then impacts may occur. S-2-18

In addition, roadwork in Los Angeles County often requires night work to reduce traffic congestion during lane closures due to construction activities. Night work requires additional lighting. Lighting impacts from night work were not mentioned within the ND/EA, and artificial lighting can have impacts to bats and other wildlife in the vicinity of the Project. S-2-19

Evidence impact would be significant: Bats are considered non-game mammals and are afforded protection by State law from take and/or harassment (Fish & Game Code, § 4150; Cal. Code of Regs, § 251.1). Several bat species are considered SSC and meet the CEQA definition of S-2-20

rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065). S-2-20

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #7: CDFW recommends Mitigation Measure AS-3 be revised by incorporating the underlined language:

> "The District Biologist will conduct a nighttime emergence using acoustic recognition technology to survey Bridge 53-0060 (San Gabriel River Bridge) in the recognized bat maternity season (March 1 through October 31) prior to commencement of construction to determine if roosting bats are present. The District Biologist will also conduct a preconstruction survey at Bridge 53-0060 (San Gabriel River Bridge) no more than two weeks prior to commencement of construction to determine the presence or absence of bats. If bats are discovered at the site, no construction activities shall begin until approved bat exclusionary devices equipped with exit-only materials and roosting preventive measures are put in place on all features with potential for roosting bats that would be impacted by the proposed project activities in order to prevent bat occupation. Bat exclusionary devices shall be installed under the supervision of a CDFW-approved, qualified biologist. If bats were observed, the District Biologist will conduct daily surveys during construction to determine the presence or absence of regulated bat species. If bat maternity roosting is confirmed, construction activities shall avoid the recognized bat maternity season (March 1 through October 31) to prevent potential mortality of flightless young bats." S-2-21

Mitigation Measure #8: All temporary and permanent light sources should include the appropriate shielding to avoid excessive light pollution into natural landscapes or aquatic habitat. S-2-22

Comment #4: California Fully Protected Bird Species

Issue: The Project may impact California Fully Protected bird species, specifically California least tern (*Sterna antillarum browni*). California least tern are also CESA-listed as endangered.

Specific impacts: According to page 2-163 in the ND/EA, California least tern have a potential to occur at the Project location. Project construction and activities, directly or through habitat modification, may result in injury or mortality, reduced reproductive capacity, population declines, or local extirpation of these California Fully Protected bird species. Temporal or permanent loss of foraging, breeding, nesting, or nursery habitat may occur. S-2-23

Why impacts would occur: According to page 2-163 in the ND/EA, suitable foraging habitat is present for California least tern at the Project location. In addition, page 2-168 of the ND/EA states that general habitat is present within the vicinity of the Project. CDFW is concerned that the Project may impact California least terns that use the habitat in and adjacent to the Project site. Impacts to this species may occur as a result of ground-disturbing (e.g., staging, mobilization, demolition, and grading) activities, vegetation removal, increased human activity, noise disturbances, light, and dust. The Project proposes mitigation by conducting a pre-project survey prior to commencement of construction and monitoring by a District Biologist during construction. Surveying and monitoring only identify the species, but do not provide measures to avoid impacts of California Fully Protected birds. California Fully Protected species may not be taken at any time. S-2-24

Evidence impact would be significant: The Project may result in adverse effects, either directly or through habitat modifications, on a California Fully Protected species. Take of any species S-2-25

designated as California Fully Protected under the Fish and Game Code is prohibited. CDFW cannot authorize the take of any California Fully Protected species as defined by State law. California Fully Protected species may not be taken or possessed at any time. No licenses or permits may be issued for take, except for collecting those species for necessary scientific research and relocation of the bird species for protection of livestock (Fish & G. Code, § 3511). S-2-25

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #9: Prior to project activities, a qualified biologist should develop a robust avoidance, buffer, and demarcation plan specifically for California Fully Protected birds depending on the Project area, species, life stage(s), and scope of work. The plan should include a minimum of a 0.5 mile no-disturbance buffer around each nest of California least tern. S-2-26

Mitigation Measure #10: CDFW recommends Caltrans revise Mitigation Measure AS-2 by incorporating the underlined language:

> "The District Biologist will monitor Bridge 53-0060 (Sab Gabriel River Bridge) for green sea turtles and California least terns during construction to prevent unanticipated impacts to these species. If any California least tern nests are observed within the project area, immediately cease work and notify CDFW." S-2-27

Comment #5: Impacts to Southern California Distinct Population Segment of Steelhead (*Oncorhynchus mykiss*) and Fish Passage

Issue: The Project may impact southern California steelhead, a candidate species protected under CESA. S-2-28

Specific impacts: The Project could result in impacts to migrating steelhead due to in-stream Project activities. In addition, the Project may not have addressed fish passage requirements.

Why impacts would occur: CDFW is concerned that in-stream Project activities may impact migrating steelhead. The ND/EA did not consider steelhead to be present and did not address impacts to steelhead within the CEQA document. The Project location has unimpeded access from the ocean. Therefore, the Project location may have steelhead occurrences during steelhead migration season. The Project requires installing 24 CISS piles to widen the bridges. This activity likely will require dewatering or diverting water around the piles during construction. Diversions during steelhead migration season could cause impacts to these CESA-candidate species. In addition, installing CISS piles requires pile driving produce high intensity sound waves which may injure steelhead. S-2-29

Fish passage of the San Gabriel Bridge was also not addressed within ND/EA. Also, Fish and Game Code section 5901 prohibits the construction or maintenance of any structure that prevents or impedes fish passage. The CDFW Passage Assessment Database (PAD) indicates that this bridge may inhibit steelhead passage. Per the results of the reconnaissance survey conducted by the California Conservation Corps on July 28, 2020, this crossing requires a detailed survey to determine potential passage constraints. Consequently, the bridge may prevent adequate fish passage as required by the California Streets and Highways Code section 156.3. S-2-30

Evidence impacts would be significant: Consistent with CEQA Guidelines section 15380, the candidate status of southern California steelhead qualifies it as a special status species under CEQA. Per Fish and Game Code section 5901, it is unlawful to construct or maintain in any stream any device or contrivance the prevents, impedes, or tends to prevent or impeded, the passing of

fish up and downstream. Per CESA, take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). S-2-31

Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #1: The Project has the potential to take steelhead, a candidate species under CESA. Caltrans should seek appropriate take authorization, and early consultation is encouraged. CDFW may consider the Lead Agency's CEQA documentation for its CESA-related actions if it adequately analyzes/discloses impacts and mitigation to CESA-listed species. Additional documentation may be required as part of an ITP application for the Project in order for CDFW to adequately develop an accurate take analysis and identify measures that would fully mitigate for take of CESA-listed species. S-2-32

Mitigation Measure #11: According to California Streets and Highways Code section 156.3, if a Project affects a crossing on a stream where anadromous fish are, or historically were found, Caltrans must complete an assessment of potential barriers to fish passage prior to initiating Project design. Caltrans must also submit the assessment to CDFW. Furthermore, if a structural barrier exists, Caltrans shall include remediation of the barrier in the design plans, and Caltrans shall develop the Project in consultation with CDFW. S-2-33

Mitigation Measure #12: To avoid impacts to steelhead all work within the stream channel shall be limited to the non-migratory season (November 1 through April 30). S-2-34

Additional Recommendations

Lake and Streambed Alteration Notification. CDFW concurs with the Project's proposed Mitigation Measure WQ-3 which would require Caltrans to notify CDFW pursuant to section 1600 *et seq.* of the Fish and Game Code. Please visit CDFW's Lake and Streambed Alteration Program webpage for information about LSA Notification and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal. Please note, CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document of the Lead Agency for the Project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the CEQA document should fully identify the potential impacts to streams or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. S-2-35

Nesting Bird Season. Birds nest generally between February 1 to September 1. Mitigation Measure AS-5 in the ND/EA incorrectly requests that construction should occur during nesting season. CDFW recommends this measure be rewritten to correspond with PF-BIO-1, which states the intent of the measure correctly. S-2-36

Mitigation and Monitoring Reporting Plan. CDFW recommends updating the proposed Biological Resources Mitigation Measures to include mitigation measures recommended in this letter. Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments [(Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15126.4(a)(2)]. As such, CDFW has provided comments and recommendations to assist Caltrans in developing mitigation measures that are (1) consistent with CEQA Guidelines section 15126.4; (2) specific; (3) detailed (i.e., responsible party, timing, specific actions, location), and (4) clear for a measure to be fully enforceable and implemented successfully via mitigation monitoring and/or reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097). Caltrans is S-2-37

welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided Caltrans with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A).

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals. S-2-38

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.) S-2-39

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist Caltrans in identifying and mitigating project impacts on biological resources. CDFW requests an opportunity to review and comment on any response that Caltrans has to our comments. Questions regarding this letter or further coordination should be directed to Erika Cleugh Senior Environmental Scientist (Specialist) at (949) 619-5228 or Erika.Cleugh@wildlife.ca.gov.

Sincerely,

DocuSigned by:

Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

ec: CDFW
Victoria Tang, Los Alamitos – Victoria.Tang@wildlife.ca.gov
Erika Cleugh, Los Alamitos – Erika.Cleugh@wildlife.ca.gov
Cindy Hailey, San Diego – Cindy.Hailey@wildlife.ca.gov
CEQA Program Coordinator, Sacramento – CEQACommentLetters@wildlife.ca.gov

OPR
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Attachment A: Draft Mitigation and Monitoring Reporting Plan

Biological Resources (BIO)			
Mitigation Measure (MM) or Recommendation (REC)		**Timing**	**Responsible Party**
MM-1	Caltrans shall perform at least two species specific surveys at the peak and near the end of flowering season for southern tarplant within the Project footprint. Focused surveys shall be conducted according to CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.	Prior to Project activities	Caltrans
MM-2	A summary of survey methods, including negative findings, shall be provided in the CEQA document, and a full survey report provided as an Appendix. If southern tarplant is found, the document shall include a detailed map in to show the location of individual plants or populations, and number of plants or density of plants per square feet occurring at each location. A complete survey report shall provide the following information: a) A description and map of the survey area; b) Field survey conditions that should include name(s) of qualified biologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched; c) If a qualified biologist does not find southern tarplant, provide a detailed discussion to support how this determination was made; d) If southern tarplant is found, provide a map showing the location of individual plants or populations, and number of plants or density of plants per square feet occurring at each location. Use appropriate symbology, text boxes, and other map elements to show and distinguish between species found and which plants/populations will be avoided versus impacted by Project	Prior to project activities	Caltrans

	construction and activities that would require mitigation; and e) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where southern tarplant was found.		
MM-3	If avoidance of southern tarplant, a CRPR 1 plant, is not feasible, the Project shall compensate for the loss of the species to ensure that there is no net loss of the species. Caltrans shall provide adequate analysis ensuring no net loss with proposed compensation. A plan for mitigation shall be fully developed and executed prior to Project construction. A restoration plan shall be prepared by a qualified botanist and/or restoration specialist and include the following information: a) the specific location of restoration sites and assessment of reference sites; b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; c) a schematic depicting the mitigation area; d) a local seed and cuttings and planting schedule; e) a description of the irrigation methodology; f) measures to control exotic vegetation on site; g) specific success criteria; h) a detailed monitoring program; and i) contingency measures should the success criteria and providing for conservation of the mitigation on site in perpetuity. Monitoring of restoration areas shall extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.	Prior to project activities	Caltrans
MM-4	After construction activities, temporary fencing shall be removed in phases depending on construction progress and replaced with permanent fencing to preserve rare plants and habitat.	After construction activities	Caltrans
MM-5	If pile driving will occur within the channel, an underwater sound attenuation monitoring plan shall be developed. The plan shall describe underwater sound monitoring methods and mitigation measures to avoid injurious sound pressure levels to fish, marine mammals, and sea turtles during in-water construction work. The sound pressure levels shall not exceed 206 decibels (dB) peak	Prior to Project activities	

	level, and 187 dB accumulated sound exposure level (SEL) for all listed fish except those that are less than two grams. In that case, the criteria for the accumulated SEL shall be 183 dB. The NMFS Marine Mammal Acoustic Technical Guidance provides thresholds for underwater noise impacts to marine mammals. Monitoring results shall be provided to CDFW and other appropriate regulatory agencies for review.		Caltrans
MM-6	"Biological monitor is needed when construction is taking place in the stream channel. at Post Mile 0.04. The District Biologist will monitor each morning prior to the start of construction for green sea turtles and California least tern during construction to prevent unanticipated impacts to these species. If green sea turtles are present, construction should pause until they leave on their own volition."	During construction activities	Caltrans
MM-7	"The District Biologist will conduct a nighttime emergence using acoustic recognition technology to survey Bridge 53-0060 (San Gabriel River Bridge) in the recognized bat maternity season (March 1 through October 31) prior to commencement of construction to determine if roosting bats are present. The District Biologist will also conduct a preconstruction survey at Bridge 53-0060 (San Gabriel River Bridge) no more than two weeks prior to commencement of construction to determine the presence or absence of bats. If bats are discovered at the site, no construction activities shall begin until approved bat exclusionary devices equipped with exit-only materials and roosting preventive measures are put in place on all features with potential for roosting bats that would be impacted by the proposed project activities in order to prevent bat occupation. Bat exclusionary devices shall be installed under the supervision of a CDFW-approved, qualified biologist. If bats were observed, the District Biologist will conduct daily surveys during construction to determine the presence or absence of regulated bat species. If bat maternity roosting is confirmed, construction activities shall avoid the recognized bat maternity season (March 1 through October 31) to prevent potential mortality of flightless young bats."	Prior to Project activities	Caltrans

MM-8	All temporary and permanent light sources shall include the appropriate shielding to avoid excessive light pollution into natural landscapes or aquatic habitat.	During construction	Caltrans
MM-9	Prior to Project activities, a qualified biologist shall develop a robust avoidance, buffer, and demarcation plan specifically for California Fully Protected birds depending on the Project area, species, life stage(s), and scope of work. The plan shall include a minimum of a 0.5 mile no-disturbance buffer around each nest of California least tern.	Prior to Project activities	Caltrans
MM-10	"The District Biologist will monitor Bridge 53-0060 (Sab Gabriel River Bridge) for green sea turtles and California least terns during construction to prevent unanticipated impacts to these species. If any California least tern nests are observed within the project area, immediately cease work and notify CDFW."	During construction	Caltrans
REC-1	The Project has the potential to take steelhead, a candidate species under CESA. Caltrans should seek appropriate take authorization, and early consultation is encouraged. CDFW may consider the Lead Agency's CEQA documentation for its CESA-related actions if it adequately analyzes/discloses impacts and mitigation to CESA-listed species. Additional documentation may be required as part of an ITP application for the Project in order for CDFW to adequately develop an accurate take analysis and identify measures that would fully mitigate for take of CESA-listed species.	Prior to Project construction	Caltrans
MM-11	According to California Streets and Highways Code section 156.3, if a Project affects a crossing on a stream where anadromous fish are, or historically were found, Caltrans must complete an assessment of potential barriers to fish passage prior to initiating Project design. Caltrans must also submit the assessment to CDFW. Furthermore, if a structural barrier exists, Caltrans shall include remediation of the barrier in the design plans, and Caltrans shall develop the Project in consultation with CDFW.	Prior to Project construction	Caltrans

MM-12	To avoid impacts to steelhead, all work within the stream channel shall be limited to the non-migratory season (November 1 through April 30).	During construction	Caltrans

Response to Comment S-2-1
Caltrans is planning to use a standard specification called the 'duff spec' which stockpiles the top layer of soil collected from the temporary impact areas prior to ground disturbance. The stockpiled soil (a.k.a. duff) will contain the existing seed bank and will be spread over the disturbed area following construction. Measures to avoid or minimize impacts to the Southern Tarplant have been included in the Environmental Commitment Record for this project.

Response to Comment S-2-2
Southern Tarplant (*Centromadia parryi* ssp *australis*) is a CNPS listed plant. Caltrans will conduct pre-construction botanical surveys according to the guidelines published in the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* by CDFW. Measures to avoid or minimize impacts to the Southern Tarplant have been included in the Environmental Commitment Record for this project.

Response to Comment S-2-3
No revision needed. Caltrans acknowledges that CDFW has accepted Avoidance and Minimization Measures PS-2 and PS-4.

Response to Comment S-2-4
The Caltrans Biological findings take into account an understanding of the ramifications of relocating rare plants. There will be no relocation of Southern tarplant to offsite locations; only temporary relocation in pots when necessary. Avoidance and minimization measures will be in place.

Response to Comment S-2-5
Caltrans has identified and will implement several avoidance and minimization measures to address potential impacts to Southern tarplant. The Environmental Commitments Record (ECR) can be found in Appendix E of this document.

Response to Comment S-2-6
Caltrans concurs and will follow *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* by CDFW.

Response to Comment S-2-7
Caltrans will complete the surveys as requested and will provide the survey report to CDFW within the next flowering season.

Response to Comment S-2-8
A Mitigation Plan will be prepared during the PS&E phase of the project following completion of protocol surveys. Either on-site restoration will be completed or off-site mitigation will be completed at the nearest southern tarplant population.

Response to Comment S-2-9
The restoration plan will be prepared once the protocol surveys are completed; it will contain the requested information.

Response to Comment S-2-10

The Project Development Team during the PS&E phase of the project will discuss the potential to install permanent fencing.

Response to Comment S-2-11
See previous response to comment S-1-9.

Response to Comment S-2-12
Although no green sea turtles were observed during project surveys, Caltrans acknowledges their potential to be present within the project area. Caltrans will incorporate downstream water quality control and BMPs into the project plans.

Response to Comment S-2-13
Please see the response to Comment S-1-8. In addition, Caltrans will develop an acoustic monitoring plan during the final design phase of the project that will outline the methods for avoiding adverse impacts.

Response to Comment S-2-14
No response needed.

Response to Comment S-2-15
See response to comment S-2-13 above.

Response to Comment S-2-16
Caltrans acknowledges that CDFW has accepted Avoidance and Minimization Measure TE-4. Avoidance and Minimization Measure TE-1 has been revised with the requested revisions, as outlined in CDFW's comment letter.

Response to Comment S-2-17
No bats or signs of bats were observed at the San Gabriel River Bridge during project surveys, but the use of suitable roosting structures can vary from season to season and year to year. Caltrans acknowledges the potential for special status bats to utilize the bridge and adjacent areas. Bat acoustic surveys, as described in Mitigation Measure AS-3, will be conducted during the bat maternity season prior to commencement of construction to evaluate the presence or absence of bats at the San Gabriel River bridge or surrounding areas. Measures identified in AS-3 will be implemented as needed to ensure impacts are avoided.

Response to Comment S-2-18
See response to comment S-2-17.

Response to Comment S-2-19
As the comment states, nighttime work is frequently required on freeways and bridges in Los Angeles County. Caltrans has developed standard specifications to avoid potential impacts on wildlife species associated with nighttime construction lighting. These specifications will be included in the Plans, Specifications, and Estimates (i.e., the contractor's bid package) and will be implemented during construction if wildlife species are present.

Response to Comment S-2-20
Please see responses to comments S-2-16, 17, and 18.

Response to Comment S-2-21

Avoidance and Minimization Measure AS-3 has been revised with the requested revisions, as outlined in CDFW's comment letter.

Response to Comment S-2-22
The need for temporary or permanent lighting sources will be identified during the PS&E phase of this project. Specifications that include shielding of lights and avoidance of sensitive areas will be included in the PS&E package.

Response to Comment S-2-23
Caltrans coordinated with the United States Fish and Wildlife Service (USFWS), Carlsbad Office, and they did not raise any concerns regarding the potential presence of California least tern in the area. USFWS mentioned that the nearest California least tern population is 8.5 miles from the project location and they did not have concerns with impacts to this species.

Response to Comment S-2-24
If California least terns are observed within the project vicinity, construction activities would immediately cease and CDFW and USFWS would be notified. Activities that could potentially impact the species would not resume until a course of action, acceptable to CDFW and USFWS, is developed and implemented.

Response to Comment S-2-25
Please see response to comments S-2-23, 24 and 27. No impacts are anticipated.

Response to Comment S-2-26
An avoidance buffer and demarcation plan is not needed since the nearest nesting location for this species is 8.5 miles away from the project location.

Response to Comment S-2-27
Avoidance and Minimization Measure AS-2 has been revised with the requested revisions, as outlined in CDFW's comment letter.

Response to Comment S-2-28
According to California Natural Diversity Database (CNDDB), provided by CDFW, there is no current record of Southern California steelhead utilizing the San Gabriel River channel. Also, given the width of the river, construction activities would not result in a barrier to migration of any species.

Response to Comment S-2-29
The ND/EA did not consider steelhead to be present at the project location because of the current condition of the channel. Also, according to the California Natural Diversity Database (CNDDB) by CDFW, there is no current record of Southern California steelhead in the San Gabriel River channel.

Even so, the acoustic monitoring plan that is developed during the final design phase of the project (see response to comment S-2-12) and the monitoring done for green sea turtles (see response to comment S-1-8) will provide an early warning and actionable steps should steelhead trout approach the project area.

Response to Comment S-2-30

The CDFW Passage Assessment Database (PAD) (accessed online at https://apps.wildlife.ca.gov/bios/?al=ds69 on 12/18/22) identifies the project location as having "Unknown Passage Status". Caltrans will evaluate this location as a potential fish passage constraint during the PS&E phase of the project.

Response to Comment S-2-31
Based on the information available at this time, "take" of steelhead trout, or any other endangered, threatened, or candidate species, is not anticipated. If future surveys/studies change this determination, Caltrans will coordinate with CDFW and apply for an Incidental Take Permit (ITP).

Response to Comment S-2-32
Please see response to comment S-2-31.

Response to Comment S-2-33
Caltrans will evaluate the potential barriers to anadromous fish at this location.

Response to Comment S-2-34
Caltrans will work during the appropriate season if steelhead are found within the project limits.

Response to Comment S-2-35
No response needed.

Response to Comment S-2-36
The dates in Measure AS-5 have been corrected per your comment.

Response to Comment S-2-37
All Avoidance, Minimization and Mitigation measures have been revised as needed and as stated in our responses to your comments. They will continue to be revised as needed as the project progresses through the final design phase and as required by the Streambed Alteration Agreement.

Response to Comment S-2-38
Caltrans is in receipt of this comment and will comply.

Response to Comment S-2-39
The CDFW Environmental Filing Fee will be paid when the Notice of Determination is filed with the State Clearinghouse.

S-3

From: Borack, Alexandra@SLC <Alexandra.Borack@slc.ca.gov>
Sent: Thursday, October 13, 2022 1:17 PM
To: Price, Karl F@DOT <karl.price@dot.ca.gov>
Subject: San Gabriel River Bridge Widen & Upgrade Project (SCH #2022100105)

EXTERNAL EMAIL. Links/attachments may not be safe.

Good afternoon Mr. Price,

State Lands Commission staff is reviewing the draft MND for the San Gabriel River Bridge Widen & Upgrade Project (Project). The MND did not appear to mention of an existing S&HC 101.5 permit for the bridge - can you confirm whether Caltrans submitted a 101.5 map for State

S-3-1

Lands approval? In addition, I could not determine whether the Project activities would require any in-water work and/or use of barges. Can you specify the TCEs needed for the Project?

S-3-2

Thank you.
Alexandra

CALIFORNIA STATE LANDS COMMISSION

Alexandra Borack, Senior Environmental Scientist
Division of Environmental Planning and Management
100 Howe Avenue, Ste 100-South | Sacramento | CA 95825 | 916.574.2399

"Be kind whenever possible. It is always possible." - Dalai Lama

Response to Comment S-3-1
During the PS&E phase of this project, Caltrans will determine if a new 101.5 map is needed.

Response to Comment S-3-2
Temporary Construction Easements (TCEs) will be needed for staging and construction of the project. Work within the waterway (San Gabriel River Channel) would be necessary at the San Gabriel River Bridge and would be performed in compliance with all required conditions specified in permits from resource protection agencies. The exact construction methods, including the need for barges, will be determined at a later project phase.

L.2 Local Agencies (L Series)

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City of Seal Beach

CITY HALL 211 EIGHTH STREET
SEAL BEACH, CALIFORNIA 90740
(562) 431-2527 • www.sealbeachca.gov

October 21, 2022

L-1

Karl Price, Senior Environmental Planner
Division of Environmental Planning
Caltrans District 7
100 South Main Street, Suite 100, MS-16A
Los Angeles, CA 90012

SUBJECT: EA 07-32090 SAN GABRIEL RIVER BRIDGE RAIL UPGRADE AND WIDENING PROJECT – ENVIRONMENTAL ASSESSMENT

Dear Mr. Price:

The City of Seal Beach (City) is in receipt of Department of Transportation – District 7's (Caltrans) *Notice of Intent to Adopt a Negative Declaration and Notice of Availability of an Environmental Assessment for the San Gabriel River Bridge Rail Upgrade and Widening Project*, dated September 30, 2022. The City would like to offer the following comments:

1. In addition to the other agencies cited in the IS/EA, the City of Seal Beach also maintains the San Gabriel River Trail; however, it does not a appear that the City was consulted on the potential project impacts. L-1-1
2. The SGR Bridge connects the City of Long Beach and the City of Seal Beach over the San Gabriel River, where the project area as noted on Page 1-9 is also within the City of Seal Beach, Orange County. The City respectfully request Caltrans to proactively coordinate this effort and consider the City as a stakeholder. L-1--2

Should you have any questions regarding the above please feel free to contact me at (562) 431-2527 x1322, or ilee@sealbeachca.gov.

Sincerely,
CITY OF SEAL BEACH

Iris Lee
Acting Public Works Director

Cc: Alexa Smittle, Director of Community Development

Response to Comment L-1-1
The San Gabriel River Bike Trail within the project limits is within the City of Long Beach. After coordinating with the Los Angeles County Department of Public Works (they were originally believed to be responsible for maintaining the trail) and the City of Long Beach, it was determined that the City of Long Beach Department of Public Works is the Official/Agency with Jurisdiction over the Trail. Therefore, discussions regarding potential impacts to the Trail were held with the City of Long Beach.

Response to Comment L-1-2
As requested by the City of Seal Beach, Caltrans has been coordinating with staff from the City of Seal Beach Department of Public Works. Caltrans was asked to give an informational presentation at the November 15, 2022 City Council meeting. A presentation was prepared and Caltrans staff were present at City Hall at the appropriate time; a scheduling error was made and we were not able to give the presentation at that time. Coordination is ongoing to schedule another opportunity to make the presentation.

L.3 Businesses and General Public (G Series)

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G-1

From: Dee <dxschu@aol.com>
Sent: Thursday, October 13, 2022 10:11 AM
To: Price, Karl F@DOT <karl.price@dot.ca.gov>
Subject: San Gabriel River Bridge

EXTERNAL EMAIL. Links/attachments may not be safe.

I am writing to express my concerns and questions regarding San Gabriel River Bridge:
1. Will the bike path under the bridge be raised & repaved so that it will no longer be submerged at high tides? G-1-1

Fact: Bicyclists must cross PCH when tides flood the bike path, causing dangerous conditions for drivers and cyclists.

I look forward to hearing from you.
Dee Schumacher
233 Corsair Way
Seal Beach, CA 90740
562.756.0332

Sent from the all new AOL app for Android

Response to Comment G-1-1
The City of Long Beach Department of Public Works is the Official with Jurisdiction over the San Gabriel River Bike Trail at this location and any request to alter the Trail would need to be submitted to them. Raising the Trail is outside the scope of this project.

G-2

Price, Karl F@DOT

From: SD Hargreaves <steveh180@hotmail.com>
Sent: Wednesday, November 2, 2022 11:24 AM
To: Price, Karl F@DOT
Subject: comments: San Gabriel River Bridge widening at PCH, Long Beach/Seal Beach border

Follow Up Flag: Follow up
Flag Status: Flagged

EXTERNAL EMAIL. Links/attachments may not be safe.

File: EA 07-32090
EFIS: 0716000043
LA-01, PM 0.04

1) This project is a complete waste of taxpayer dollars and DOT time, for unnecessary improvements. G-2-1
2) The Bridge works as is. G-2-2
3) The noise and pollution that will be created with construction will negatively impact marine wildlife in the river, and local neighborhoods as well. G-2-3
4) None of the people living in this neighborhood asked for this project. G-2-4
5) Who is it that wants to build this? G-2-5
6) Requesting a public hearing. G-2-6

Steve Hargreaves
949-350-5199
SteveH180@hotmail.com

Response to Comment G-2-1
The existing bridge railings do not meet current design standards. This project is needed to continue the District's efforts to eliminate non-standard bridge rails on structures within the District and improve safety. In addition, there are several deficiencies related to the existing bridge geometry. They are:

- The existing superelevation does not meet design speed requirements.
- The existing two-foot-wide median width is too narrow compared to latest highway design standard.
- The existing five-foot-wide bridge sidewalk is too narrow compared to the latest highway design standard requirement of six (6) feet minimum. Narrow sidewalks result in lower pedestrian comfort and safety.
- The existing five-foot right shoulders are too narrow based on the latest highway design standard requirement of 8 feet.
- The existing five-foot shoulder/bike path width is too narrow. The five-foot shoulders cannot accommodate a bike path while providing a two-foot buffer for safety.

The improvements proposed by this project will help increase safety for pedestrians, bicyclists, and drivers within the project limits.

Response to Comment G-2-2
Please see the response to comment G-2-1. ~~The existing bridge railings do not meet the current standards. This project is needed to continue the District's efforts to eliminate non-standard bridge rail on structures within the District and improve safety. Current deficiencies related to the bridge geometry for this project are as follows:~~

- ~~Existing superelevation does not meet design speed requirements.~~
- ~~Existing two (2) feet wide median width is too narrow compared to latest highway design standard.~~
- ~~Existing five (5) feet bridge sidewalk is too narrow compared to the latest highway design standard requirement of six (6) feet minimum. Narrow sidewalks result in lower pedestrian comfort.~~
- ~~Existing concrete Balustrades Type bridge railing is not considered safe in the latest highway design standard per the most recent MASH crash test findings.~~
- ~~Existing five (5) feet right shoulders are too narrow based on the latest highway design standard requirement of 8 feet.~~
- ~~Existing five (5) feet shoulder/bike lane width is too narrow. The five (5) feet shoulders cannot accommodate a bike path while providing two (2) feet of buffer for safety.~~

Response to Comment G-2-3
A noise analysis conducted for this project concluded that neither Build Alternative would result in a substantial increase in noise levels for sensitive receptors either during construction or operation of the bridge. Permanent noise abatement measures are not needed. However, standard avoidance and minimization measures will be implemented to minimize noise impacts to local residents and businesses during construction. In addition, an acoustic monitoring plan will be developed and a biological monitor will be present to ensure that noise impacts to wildlife are avoided or minimized.

Response to Comment G-2-4

This project has been proposed to improve the safety and operation of the bridge. In addition, it will improve multi-modal access to local users. All of this is in accordance with the Caltrans 2020-2040 Strategic Plan.

Response to Comment G-2-5
As the owner/operator of the state highway network, Caltrans is responsible for operating and maintaining a safe and reliable transportation system. When deficiencies arise, or when new, stricter standards are developed, projects are proposed to bring facilities up to current standards. This project has been proposed to improve the safety and operation of the bridge, and to bring it up to current design standards.

Response to Comment G-2-6
A notice of "Opportunity for Public Hearing" was published during circulation of the draft environmental document. A request was received but well after the due date set in the notice. As a result, there was no public hearing conducted.

Appendix M. Air Quality Conformity Checklist

Transportation Air Quality Conformity Findings Checklist

PROJECT INFORMATION

Project Name: San Gabriel River Bridge project
DIST-CO-RTE-PM: 07-LA-1-0.04/0.04
EA: 32090 **Federal Aid Number:**
Document Type: ☐ 23 USC 326 CE ☐ 23 USC 327 CE ☒ EA ☐ EIS

CHECKLIST

Step 1. Is the project located in a nonattainment or maintenance area for ozone, nitrogen dioxide, carbon monoxide (CO), PM2.5, or PM10 per EPA's Green Book listing of non-attainment areas?

☐ If no, go to Step 18. **Transportation conformity does not apply to the project.**

☒ If yes, go to Step 2.

Step 2. Is the project exempt from conformity per 40 CFR 93.126 or 40 CFR 93.128?

☒ If yes, go to Step 18. **The project is exempt from all project-level conformity requirements (40 CFR 93.126 or 128)** (check one box below and identify the project type, if applicable).

- ☒ 40 CFR 93.126[1]
  Project type from Table 2: Safety: Widening narrow pavements or reconstructing bridges (no additional travel lanes)
- ☐ 40 CFR 93.128

☐ If no, go to Step 3.

Step 3. Is the project exempt from regional conformity per 40 CFR 93.127?

☐ If yes, go to Step 8. **The project is exempt from regional conformity requirements (40 CFR 93.127)** (identify the project type).
Project type: _____

☐ If no, go to Step 4.

Step 4. Is the project located in a region with a currently conforming RTP and TIP?

☐ If yes, **the project is included in a currently conforming RTP and TIP per 40 CFR 93.115. The project's design and scope have not changed significantly from what was assumed in RTP conformity analysis (40 CFR 93.115[b])** Go to Step 8.

☐ If no and the project is located in an isolated rural area, go to Step 5.

☐ If no and the project is not located in an isolated rural area, STOP and do not proceed until a conforming RTP and TIP are adopted.

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[1] Please refer to Clarifications on Exempt Project Determinations to verify exempt project type from Table 2. Road diets, auxiliary lanes less than one-mile, and ramp metering may be exempt under "projects that correct, improve, or eliminate a hazardous location or feature."

Revised: 02/2022 Page 1 of 4

Step 5. For isolated rural areas, is the project regionally significant per 40 CFR 93.101, based on review by Interagency Consultation?

☐ If yes, go to Step 6.

☐ If no, go to Step 8. **The project, located in an isolated rural area, is not regionally significant and does not require a regional emissions analysis (40 CFR 93.101 and 93.109[e]).**

Step 6. Is the project included in another regional conformity analysis that meets the isolated rural area analysis requirements per 40 CFR 93.109, including Interagency Consultation and public involvement?

☐ If yes, go to Step 8. **The project, located in an isolated rural area, has met its regional analysis requirements through inclusion in a previously-approved regional conformity analysis that meets current requirements (40 CFR 93.109[e]).**

☐ If no, go to Step 7.

Step 7. The project, located in an isolated rural area, requires a separate regional emissions analysis.

☐ **Regional emissions analysis for regionally significant project, located in an isolated rural area, is complete. Regional conformity analysis was conducted that includes the project and reasonably foreseeable regionally significant projects for at least 20 years. Interagency Consultation and public participation were conducted. Based on the analysis, the interim or emission budget conformity tests applicable to the area are met (40 CFR 93.109[e] and 95.105).**[2] Go to Step 8.

Step 8. Is the project located in a CO nonattainment or maintenance area? (South Coast Air Basin only)

☐ If no, go to Step 9. **CO conformity analysis is not required.**

☐ If yes, **hot-spot analysis requirements for CO per the** CO Protocol (or per EPA's modeling guidance, CAL3QHCR can be used with EMFAC emission factors[3]) **have been met. Project will not cause or contribute to a new localized CO violation (40 CFR 93.116 and 93.123)**[4]. Go to Step 9.

Step 9. Is the project located in a PM10 and/or a PM2.5 nonattainment or maintenance area?

☐ If no, go to Step 13. **PM2.5/PM10 conformity analysis is not required.**

☐ If yes, go to Step 10.

[2] The analysis must support this conclusion before going to the next step.
[3] Use of the CO Protocol is strongly recommended due to its use of screening methods to minimize the need for modeling. When modeling is needed, the Protocol simplifies the modeling approach. Use of CAL3QHCR must follow U.S. EPA's latest CO hot spot guidance, using EMFAC instead of MOVES; see: http://www.epa.gov/otaq/stateresources/transconf/projectlevel-hotspot.htm#co-hotspot.
[4] As of October 1, 2007, there are no CO nonattainment areas in California. Therefore, the requirements to not worsen existing violations and to reduce/eliminate existing violations do not apply.

Step 10. Is the project considered to be a Project of Air Quality Concern (POAQC), as described in EPA's Transportation Conformity Guidance for PM 10 and PM 2.5?

☐ If no, **the project is not a project of concern for PM10 and/or PM2.5 hot-spot analysis based on 40 CFR 93.116 and 93.123 and EPA's Hot-Spot Analysis Guidance. Interagency Consultation concurred with this determination on _____.** Go to Step 12.

☐ If yes, go to Step 11.

Step 11. The project is a POAQC.

☐ **The project is a project of concern for PM10 and/or PM2.5 hot-spot analysis based on 40 CFR 93.116 and 93.123, and EPA's Hot-Spot Guidance. Interagency Consultation concurred with this determination on _____. Detailed PM hot-spot analysis, consistent with 40 CFR 93.116 and 93.123 and EPA's Hot-Spot Guidance, shows that the project would not cause or contribute to, or worsen, any new localized violation of PM10 and/or PM2.5 standards.** Go to Step 12.

Step 12. Does the approved PM SIP include any PM10 and/or PM2.5 control measures that apply to the project, and has a written commitment been made as part of the air quality analysis to implement the identified SIP control measures? [Control measures can be found in the applicable Federal Register notice at: https://www.epa.gov/state-and-local-transportation/conformity-adequacy-review-region-9#ca.]

☐ If yes, **a written commitment is made to implement the identified SIP control measures for PM10 and/or PM2.5 through construction or operation of this project (40 CFR 93.117).** Go to Step 14.

☐ If no, go to Step 13.

Step 13a. Have project-level mitigation or control measures for CO, PM10, and/or PM2.5, included as part of the project's design concept and scope, been identified as a condition of the RTP or TIP conformity determination? AND/OR

Step 13b. Are project-level mitigation or control measures for CO, PM10, and/or PM2.5 included in the project's NEPA document? AND

Step 13c (applies only if Step 13a and/or 13b are answered "yes"). Has a written commitment been made as part of the air quality analysis to implement the identified measures?

☐ If yes to 13a and/or 13b and 13c, **a written commitment is made to implement the identified mitigation or control measures for CO, PM10, and/or PM2.5 through construction or operation of this project. These mitigation or control measures are identified in the project's NEPA document and/or as conditions of the RTP or TIP conformity determination (40 CFR 93.125(a)).** Go to Step 14.

☐ If no, go to Step 14.

Step 14. Does the project qualify for a Categorical Exclusion pursuant to 23 USC 326?

☐ If yes, go to step 15.

☐ If no, the project requires preparation of a Categorical Exclusion, EA, or EIS pursuant to 23 USC 327. Go to Step 16.

Step 15. Is any analysis required by steps 1-13 of this form?[5]

☐ If yes, then Caltrans prepares the appropriate analysis and documentation for the project file and makes the conformity determination through its signature on the CE form. No FHWA involvement is required. See the AQCA Annotated Outline. Go to Step 18.

☐ If no, then Caltrans makes the conformity determination through its signature on the CE form. No FHWA involvement is required. Go to Step 18.

Step 16. Is the project located in a non-attainment/maintenance area for **ozone only** and considered not regionally significant/non-exempt?

☐ If yes, go to Step 18.[6]

☐ If no, then **an AQCA is needed**. See the AQCA Annotated Outline. Caltrans submits a conformity determination request to FHWA for FHWA's conformity determination. Go to Step 17.

Step 17. Send FHWA Request for Conformity Determination package and FHWA Submittal Package Checklist to DOTP- Air Quality (rodney.tavitas@dot.ca.gov) and DEA-Air Quality (daisy.laurino@dot.ca.gov) for completeness review. Please direct technical questions to DOTP-Air Quality office. Headquarters staff will coordinate with FHWA on behalf of the district.

Date of FHWA air quality conformity determination: _____

Step 18. STOP as all air quality conformity requirements have been met.

SIGNATURE

Andrew Yoon		12/8/22
Senior Transportation Engineer	Signature	Date

[5] Please note that not all projects that qualify for a categorical exclusion will be exempt from air quality conformity requirements. Many types of projects that may qualify for a CE (such as the addition of auxiliary lanes less than one-mile, weaving lanes less than one-mile, turning lanes less than one-mile, climbing lanes less than one-mile, parking, road diets, ramp metering, and even many bridge projects) MAY require some level of project level conformity analysis and may even require interagency consultation. Additionally, please note that for ALL projects the project file must include evidence that one of the three following situations apply: 1) Conformity does not apply to the project area; or 2) The project is exempt from all conformity analysis requirements; or 3) The project is subject to project-level conformity analysis (and possibly regional conformity analysis) and meets the criteria for a conformity determination. The project file must include all supporting documentation and this checklist.

[6] Project-level conformity analysis shows that the project will conform to the State Implementation Plan. Because the project area is Attainment/Unclassified for carbon monoxide (CO) and particulate matter (PM10 and PM2.5), no hot spot analysis is required for the project-level conformity determination by 40 CFR 93.116 and 93.123. The project comes from a conforming Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP). Include documentation of interagency consultation review in the final CE/EA/EIS, if applicable.