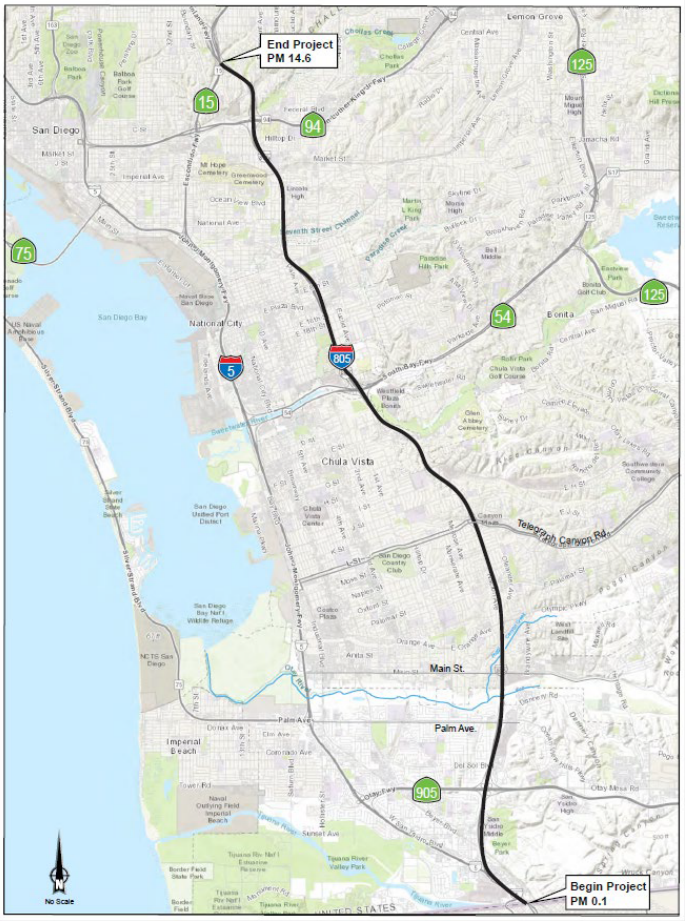
I-805 South Pavement Rehabilitation and Asset Management Project

Interstate 805
11-SD-805-PM: 0.1/14.6
Project Number: 11-43023/1118000029

Initial Study with Proposed Mitigated Negative Declaration



Prepared by the
State of California Department of Transportation

February 2023

General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in San Diego in California. The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, potential impacts of each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. Additional copies of the document and the related technical studies are available for review at the Caltrans 11 District Office at 4050 Taylor Street, San Diego, CA 92110; City of Chula Vista Public Library – South Chula Vista Branch, 389 Orange Avenue, Chula Vista, CA 91911; City of San Diego Public Library – San Ysidro Branch, 4235 Beyer Boulevard, San Diego, CA 92173; National City Public Library, 1401 National City Boulevard, National City, CA 91950; Jackie Robinson Family YMCA, 151 YMCA Way, San Diego, CA 92102; and online at the project website: https://dot.ca.gov/caltrans-near-me/district-11/current-projects/i805s-pavrehab.

- Attend the public hearing on February 23, 2023.

- Tell us what you think. If you have any comments regarding the proposed project, please attend the public hearing , and/or send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Matthew Voss, District 11 Environmental Division, California Department of Transportation, Caltrans 11 District Office at 4050 Taylor Street, San Diego, CA 92110. Submit comments via email to: matthew.voss@dot.ca.gov.

- Submit comments by the deadline: March 8, 2023.

What happens next:

After comments are received from the public and the reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

Printing this document: To save paper, this document has been set up for two-sided printing (to print the front and back of a page). Blank pages occur where needed throughout the document to maintain proper layout of the chapters and appendices.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Matthew Voss, District 11 Environmental Division, Caltrans 11 District Office at 4050 Taylor Street, MS 242, San Diego, CA 92110; 1-858-289-1276 (Voice), or use the California Relay Service 1-800-735-2929 (Teletype to Voice), 1-800-735-2922 (Voice to Teletype), 1-800-855-3000 (Spanish Teletype to Voice and Voice to Teletype), 1-800-854-7784 (Spanish and English Speech-to-Speech), or 711.

11-SD-805-PM: 0.1/14.6
11-43023/1118000029

The proposed project intends to rehabilitate and enhance multiple assets on I-805 in the cities of San Diego, Chula Vista, and National City, from Post Mile 0.1 to 14.6 in San Diego County.

INITIAL STUDY
with Proposed Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

Stefan Galvez-Abadia

Stefan Galvez-Abadia
Deputy District Director, Environmental
California Department of Transportation
CEQA Lead Agency

02/06/2023

Date

The following individual can be contacted for more information about this document:

Matthew Voss, District 11 Environmental Division Caltrans 11 District Office at 4050 Taylor Street, MS 242, San Diego, CA 92110; 858-289-1276; matthew.voss@dot.ca.gov

DRAFT
Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: pending

District-County-Route-Post Mile: 11-SD-805-PM 0.1 to PM 14.6

EA/Project Number: 11-43023/1118000029

Project Description

The California Department of Transportation (Caltrans) proposes to rehabilitate and enhance multiple assets on I-805, in the cities of San Diego, Chula Vista, and National City, from Post Mile (PM) 0.1 (0.3 mile south of Route 805/5 Separation) to PM 14.6 (Route 805/15 Separation) in San Diego County. Pavement Rehabilitation, which consists of pavement grinding, full lane replacement, individual slab replacements (ISR), ramp rehabilitation, and shoulder rehabilitation, is the anchor asset.

Determination

An Initial Study has been prepared by Caltrans District 11. On the basis of this study, it is determined that the proposed action with the incorporation of the identified mitigation measures would not have a significant effect on the environment for the following reasons:

- Caltrans would offset permanent impacts to Least Bell's vireo habitat of up to 0.0009 acre through the conservation of 0.0027 acre of riparian forest habitat suitable for vireos at the Rancho San Diego mitigation bank, or another off-site location or mitigation bank as reviewed and approved by the Carlsbad Fish and Wildlife Office (CFWO), the Carlsbad office of the USFWS.

_____

Stefan Galvez-Abadia
Deputy District Director, Environmental
California Department of Transportation

_____

Date

Table of Contents

Chapter 1 Proposed Project 1
1.1 Introduction 1
1.1.1 I-805 Background 1
1.1.2 I-805 Project Initiation 2
1.2 Purpose and Need 3
1.2.1 Purpose 3
1.2.2 Need 3
1.3 Project Description 4
1.4 Project Alternatives 8
1.4.1 Build Alternatives 8
1.4.2 No-Build (No-Action) Alternative 16
1.5 Standard Measures and Best Management Practices Included in All Build Alternatives 16
1.6 Discussion of the NEPA Categorical Exclusion 18
1.7 Permits and Approvals Needed 18
Chapter 2 CEQA Evaluation 19
2.1 CEQA Environmental Checklist 19
2.1.1 Aesthetics 19
2.1.2 Agriculture and Forest Resources 24
2.1.3 Air Quality 26
2.1.4 Biological Resources 33
2.1.5 Cultural Resources 45
2.1.6 Energy 48
2.1.7 Geology and Soils 48
2.1.8 Greenhouse Gas Emissions 49
2.1.9 Hazards and Hazardous Materials 56
2.1.10 Hydrology and Water Quality 61
2.1.11 Land Use and Planning 65
2.1.12 Mineral Resources 65
2.1.13 Noise 66
2.1.14 Population and Housing 67
2.1.15 Public Services 68
2.1.16 Recreation 68
2.1.17 Transportation 69
2.1.18 Tribal Cultural Resources 72
2.1.19 Utilities and Service Systems 72
2.1.20 Wildfire 74
2.1.21 Mandatory Findings of Significance 76
Appendix A Title VI Policy Statement 83

Chapter 1 Proposed Project

1.1 Introduction

The proposed project would rehabilitate and enhance multiple transportation assets on Interstate 805 South (I-805) in San Diego County, within the cities of San Diego, Chula Vista, and National City. The project is generally bounded by the I-805/I-5 split in the south to the I-805/I-15 split in the north, from Post Mile (PM) 0.1 to 14.6 (Figure 1). Within the project limits, I-805 is an 8 to 12 lane freeway with general purpose (GP) lanes, and High-Occupancy Vehicle (HOV) lanes between East Palomar Street and State Route 94 (SR-94). Travel lane widths range between 10 to 12 feet, inside shoulders range between 2 to 10 feet, and outside shoulders range between 4 and 10 feet. Concrete medians barriers separate the north- and southbound lanes along the project length.

This is a State Highway Operation and Protection Program (SHOPP) project with Pavement Rehabilitation as the anchor asset. The proposed project would be funded through the SHOPP Program and meet the SHOPP target assets listed in the 2017 SHOPP Ten Year Plan, as identified by the SHOPP Project Performance Measures Output. The project also proposes improvements to ride quality, mobility, roadside safety, worker safety, complete streets, and sustainability. The identified improvements would help preserve the condition of the transportation assets and improve system performance. Other assets of work include culvert system rehabilitation, safety improvements (signs, overhead signs, and Midwest Guardrail Systems (MGS)), roadside safety (planting and worker safety areas), improvements to mobility (Intelligent Transportation Systems (ITS), curb ramps, auxiliary lanes), and Complete Streets (bike path, bike lanes, etc.).

Caltrans would act as lead agency for both the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). The CEQA Initial Study with proposed Mitigated Negative Declaration (IS/MND) and NEPA Categorical Exclusion has been prepared in accordance with Caltrans' environmental procedures, as well as State and federal environmental regulations.

1.1.1 I-805 Background

The I-805 freeway was opened to traffic in the early 1970s as a major north-south freeway beginning at its southern junction with Interstate 5 (I-5) near the International Border with Mexico and continuing approximately 29 miles north to where it rejoins the I-5 in the vicinity of Sorrento Valley. It was approved as an interstate route in July 1958 and construction was completed in 1975. I-805 moves traffic through San Diego County, provides an

alternative route for traffic on I-5 to bypass downtown San Diego, and serves as a direct access route to major employment centers in Kearny Mesa, University City, and Sorrento Valley.

Since the construction of I-805, various maintenance concrete slab replacement projects have taken place, with the most recent slab replacement project completed in 2019. In 2014, two projects were completed that added HOV lanes along the north- and southbound directions between East Palomar Street and SR-94. In 2016, construction was completed that widened the freeway between Plaza Boulevard and Sweetwater Road to accommodate one auxiliary lane in each direction. In 2017, constructed was completed on the East Palomar Street direct access ramp. In 2021, construction of the I-805 Sweetwater River Bridge widening was opened to traffic. In a separate ongoing project at Plaza Boulevard, Caltrans is addressing ADA and Complete Streets items, which include, but are not limited to, curb ramps, passageways for northbound exit and entrance ramps, crosswalk striping, upgrades to electrical systems, and installation of pedestrian flashing beacons.

1.1.2 I-805 Project Initiation

The proposed project was initiated by Caltrans and a Project Initiation Proposal was completed in 2017, with a Project Initiation Report approved on February 20, 2019.

The proposed project is coordinated with the Cities of San Diego, Chula Vista, and National City for proposed improvements that affect local agency operations. Curb ramps and bicycle access are proposed to be improved at the freeway interchange intersections, as well as along over- and under-crossings.

Interstate 805 (I-805) is part of the Interstate System, and the entire length of I-805 is included in the California Freeway and Expressway System. I-805 is also part of the National Highway System, the Department of Defense Priority Network, and the Strategic Highway Corridor Network. The National Network for Surface Transportation Assistance Act (SSTA) also identifies I-805 as a “National Network” route for trucks. The proposed project is consistent with the State Highway System Management Plan, which is to maintain and operate the existing functional role and purpose of the route by maximizing mobility for local and interregional travelers by employing preventive maintenance, rehabilitation, reconstruction, and access management strategies.

The cities of San Diego, Chula Vista, and National City master plans also call for non-motorized improvements where I-805 connects to local roads and/or trails. These improvements potentially include implementing high visibility crosswalks, lead pedestrian interval timing on traffic lights, yellow-painted

crosswalks near school zones, and connection of sidewalk and bicycle network gaps.

Transit improvements have been identified for I-805 to provide additional travel operations for the public and reduce the traffic impacts on the State Highway System. Improvements included with the proposed project would correspond with any planned improvements by the City and County of San Diego, City of Chula Vista, City of National City, and the San Diego Association of Governments (SANDAG).

The route's Comprehensive Multimodal Corridor Plan, approved in 2022, proposes a major shift to transit by proposing the development of regional commuter rail line (Purple Line) that runs parallel to I-805 and I-5. This system still relies on the I-805 to provide system connectivity (i.e., bus rapid system), as well as freight service.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of this project is to restore the facility to a state of good repair to improve ride quality, minimize maintenance, and extend the service life of the existing pavement. In addition to the pavement anchor asset, the project would also repair and upgrade bridges, drainage, safety, and roadside paving while improving mobility and complete streets.

1.2.2 Need

As the anchor asset, the existing pavement shows significant distress with visible cracking. Shoulders and ramps along the project limits also show distress and cracking. Pavement rehabilitation would be addressed by lane replacements, individual slab replacements, and shoulder and ramp overlays. Installation of bridge approach slabs are proposed since many bridges within the project area were built without approach slabs which is causing settlement and cracking.

Culverts for this project show signs of deterioration and are in fair, poor, or critical condition. Rehabilitation would prevent roadway failure and ensure safety.

Signage and guardrail upgrades would be included in the project as the existing guardrail locations do not meet current standards.

The existing roadside vegetation displays poor to fair/poor quality which increases the negative visual impact and urban heat-island effects. Further,

the lack of adequate landscaping impacts other environmental factors such as limiting erosion control, dust control, and storm water treatment.

The existing landscape areas have limited access for maintenance personnel to safely stay away from vehicular traffic. To improve safety for maintenance personnel, pavement of gore and narrow areas is proposed.

As a major north-south transportation corridor, I-805 experiences significant travel delays caused by congestion and operational deficiencies such as merging conflicts during peak period travel times or when traffic volumes are at their highest. To address these deficiencies, auxiliary lanes are proposed to target and alleviate the conflicts or bottlenecks occurring on southbound between East H Street and Telegraph Canyon Road, northbound between 47th Street and Imperial Avenue, and northbound between Market Street and Home Avenue. The auxiliary lanes would provide improved weaving of vehicles entering the main through lanes without significantly delaying the flow of traffic. Additionally, aging Transportation Management Systems (TMS) that collect vehicle counts and speeds need to be upgraded for reliable data collection. Pursuant to Senate Bill 1, TMS along the existing facility have reached the end of life and are mandated to be replaced. The addition of auxiliary lanes and TMS upgrades would reduce traffic delays throughout the project area while providing improved travel times for mass transit, freight movement, commuting, and recreational travelers, alike.

Existing curb ramps do not currently meet Americans with Disability Act (ADA) compliance. Curb ramps would be upgraded to create connectivity for pedestrians through ADA standards.

To meet current complete streets and multimodal goals, existing bicycle networks were assessed, and these indicate a lack of connectivity within the project area. Class II, III, and IV bicycle facilities would be constructed to enhance complete streets. There is currently no dedicated bicycle facility between Palm Avenue and Main Street. Bicycle access is currently allowed on the shoulders of the northbound and southbound I-805; however, this option is generally not considered comfortable and convenient for bicyclists of all ages and abilities. Additionally, the existing alternative bike routes on local streets do not provide a direct connection between Palm Avenue and Main Street and include over three miles of out of direction travel. Therefore, construction of a bike trail between Palm Avenue and Main Street would eliminate this problem by providing a safe, comfortable, convenient, and connected bicycle facility for users of all ages and abilities.

1.3 Project Description

The proposed project intends to rehabilitate and enhance multiple assets on I-805 in San Diego County, in the cities of San Diego, Chula Vista, and

National City, from PM 0.1 (0.3 mile south of I-805/I-5 Separation) to PM 14.6 (I-805/I-15 Separation). Pavement Rehabilitation, which consists of pavement grinding, full lane replacement, individual slab replacements, ramp rehabilitation, and shoulder rehabilitation, is the anchor asset.

This project also proposes rehabilitating other satellite assets related to Bridge, Drainage, Safety, Signs, Roadside Safety, Mobility, and Complete Streets. The types of work include repairing and installing approach slabs, rehabilitating existing culvert systems, replacing roadside signs, overhead signs, upgrading MGS, planting work, paving beyond the gore areas, paving narrow areas, slope paving, installing mast arm ramp meters, upgrading and installing various ITS elements (census stations, changeable message signs, CCTVs, fiber optic lines, communications HUBs, traffic monitoring stations, ramp metering, roadside weather information station, point-to-point radios, and vehicle to infrastructure), upgrading existing non-standard curb ramps, constructing three auxiliary lanes, constructing a bike trail, and installing Class II, III, and IV bike lanes, and shared lanes at various interchanges.

Figure 1-1: Project Vicinity Map

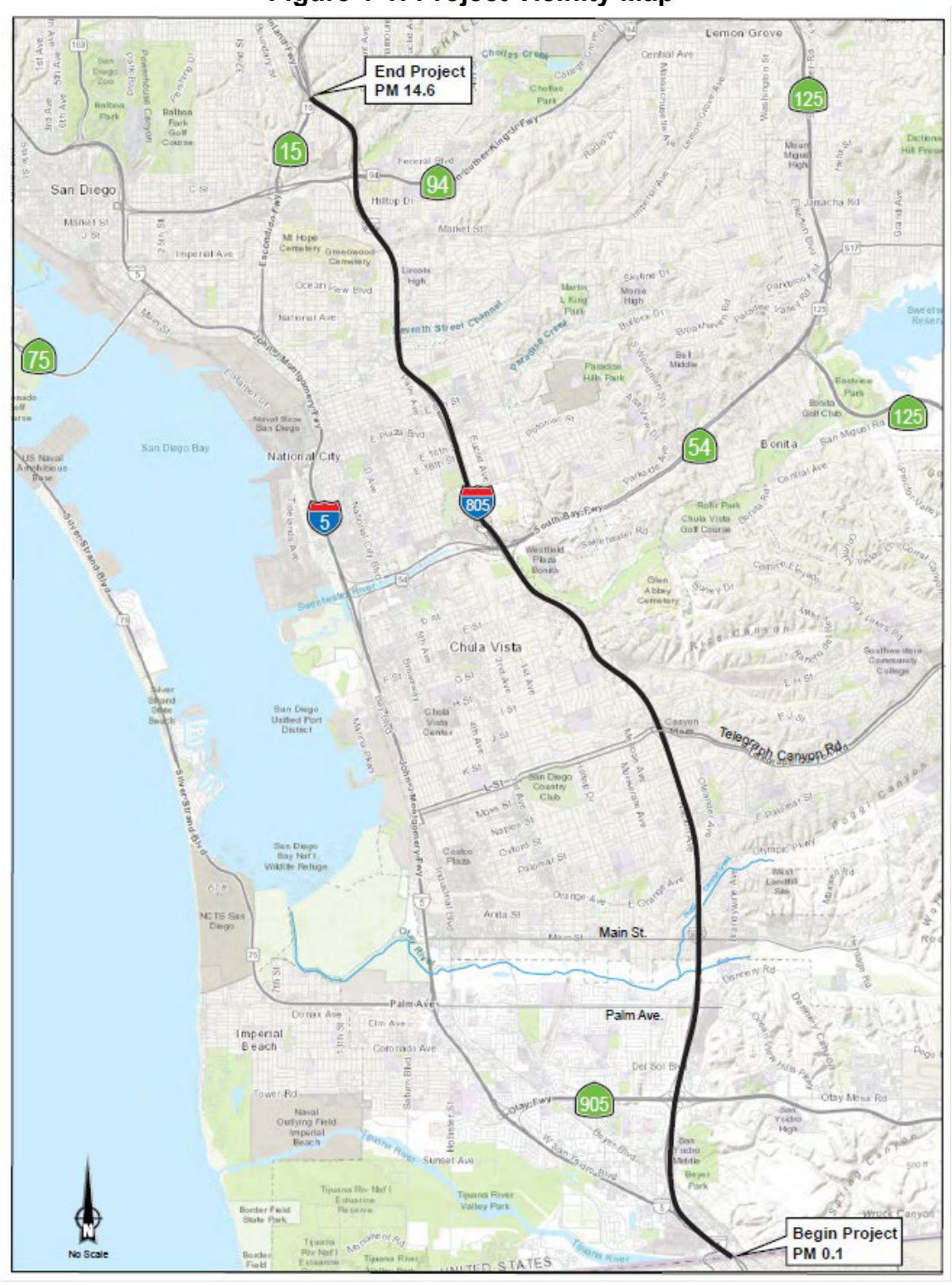
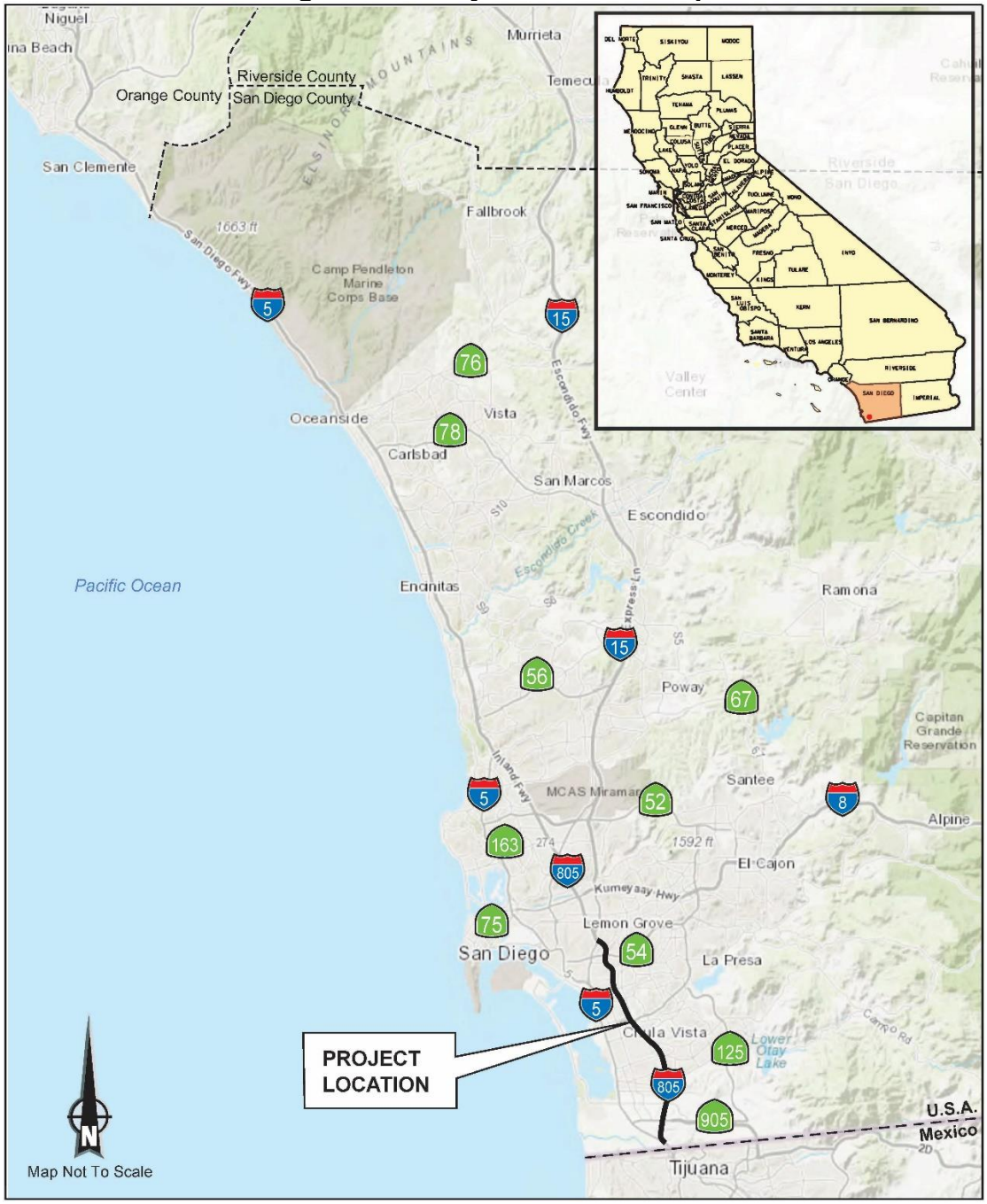


Figure 1-2: Project Location Map



1.4 Project Alternatives

This section describes the proposed project that was developed to achieve the project purpose and need while reducing environmental impacts. There are two alternatives, the Build Alternative and the No-Build Alternative.

1.4.1 Build Alternatives

The Build Alternative, also referred to as the proposed project, contains a number of standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2.

The Build Alternative proposes to rehabilitate and enhance multiple assets on I-805 from the separation from I-5 at PM 0.1 to the connection with I-15 at PM 14.6. The anchor asset for the proposed project is Pavement Rehabilitation, which would repair or replace distressed pavement on I-805 that is in fair, poor, or critical condition. The proposed assets for the Build Alternative are discussed below and shown in Table 1.4.1-1 at the end of this section.

Pavement Rehabilitation (Anchor Asset)

The proposed Pavement Rehabilitation of the existing lane structures includes Full Lane Replacement with conventional and Rapid Strength Concrete (RSC) methods, or Individual Slab Replacement (ISR) using RSC where pavement distress levels do not warrant a lane replacement strategy, grinding, structure approach slab replacement, and ramp and shoulder rehabilitation of existing concrete with cold plane and overlay using Rubberized Hot Mix Asphalt. To improve ride quality and maintain service life of the I-805, the project would specifically:

- Replace a total of 8.43 lane-miles of lanes.
- Grind a total of 31.92 lane-miles of existing Portland Cement Concrete (PCC) pavement.
- Replace a total of 0.39 lane-miles of individual slabs
- Rehabilitate a total of 8.21 lane-miles of ramps. Ramp rehabilitation work consists of cold planing 0.35 feet of existing hot mix asphalt and replacing it with 0.15 feet of rubberized hot mix asphalt and 0.20 feet of hot mix asphalt.
- Rehabilitate a total of 13.56 lane-miles of shoulders. Shoulder rehabilitation work would consist of cold planing 0.15 feet of existing

hot mix asphalt and replacing it with 0.15 feet of rubberized hot mix asphalt.

- Rehabilitate 12 bridge approach slab locations. Bridge approach slab work consists of replacing existing and constructing new approach slabs, and joint seal work.

Drainage Rehabilitation/Installation

There are two categories under Drainage Rehabilitation/Installation: Culvert Rehabilitation and the addition of New Drainage Systems resulting from a new bike trail and the three new auxiliary lanes.

Culvert Rehabilitation

The proposed project plans to rehabilitate 30 existing culvert systems and 14 end treatments along the project corridor. The proposed rehabilitation consists of 11 culvert replacements, nine Cured in Place Pipe-liners (CIPP), eight concrete/spall repairs, two invert repairs, and 14 End Treatment Repairs including embankment stabilization, regrading of channels, and adding inlets/manholes.

Installation of New Drainage Systems

Additional drainage work is proposed to accommodate the expansion of I-805, which is necessary to support the addition of the auxiliary lanes and the bike trail . This drainage work would consist of abandoning, removing, and extending the current drainage systems, and installing new drainage systems and new end treatments.

Mobility

The mobility asset category includes upgrading TMS reconstructing pedestrian curb ramps, and constructing three auxiliary lanes.

Transportation Management Systems

The proposed TMS includes installation and/or upgrading of the following elements to improve mobility and operations throughout the I-805 corridor:

- Fiber Optic Systems
- Four Communications HUBs
- Traffic Monitoring Stations
- Three Census Systems
- Ramp Metering System
- Seven Closed Circuit Television (CCTV) Systems
- Two Changeable Message Signs
- Traffic Signal System

Curb Ramps

There are 34 non-standard curb ramps that would be upgraded to meet ADA standards. Of the 34 existing curb ramps, six would require minor work such as grinding existing pavement and restriping crosswalks, and 28 would need to be reconstructed.

Auxiliary Lanes

The proposed project includes constructing three auxiliary lanes. The proposed three auxiliary lanes would improve traffic operations and operational efficiencies and would be added in areas that have been identified to have high Daily Vehicle Hours Delay (DVHD). High DVHD indicates a high amount of vehicular traffic traveling under 35 miles per hour which produces the highest levels of emissions. Adding the auxiliary lanes would reduce the DVHD by easing merging and improving travel speeds.

Auxiliary lanes will be constructed along a 0.47 mile stretch southbound from Telegraph Canyon Road to H Street, a 0.58 mile stretch northbound from 47th Street to Imperial Avenue, and a 0.27 mile stretch northbound from Market Street to Home Avenue. Retaining walls would be required to accommodate the construction of the auxiliary lanes. Along the southbound I-805, at the J Street overcrossing a 900-foot cut wall would be placed next to the proposed shoulder edge and have a height between 4 and 10-feet high, and between H and J Streets an embankment wall ranging from four to eight feet tall would be constructed. Along the northbound I-805 between Logan Avenue and Imperial Avenue a 1,950-foot cut wall ranging from 4 to 14-feet would be constructed next to the proposed shoulder edge. In addition to widening the outside travel way, the Federal Boulevard Undercrossing Bridge (Bridge No. 57-0668) would be widened by approximately 15-feet to accommodate the auxiliary lane.

Roadside Rehabilitation

The proposed project would provide replacement, restoration, and rehabilitation of existing highway planting to a maintainable state in order to reduce long-term maintenance costs of existing highway planting and related roadside infrastructure. The proposed areas to be rehabilitated are located at the I-805/SR-905 junction (PM 1.5 to 2.2) and the Plaza Boulevard Interchange (PM 10 to 10.5). Roadside Rehabilitation includes water conservation improvements by utilizing recycled water and efficient irrigation technology. The proposed Roadside Rehabilitation would improve the aesthetic quality, erosion control capability, storm water treatment, dust control, and the incremental reduction in the urban heat-island effect within the project boundaries.

Planting

The proposed work would include replacement of drought-tolerant plant material (trees, shrubs, and ground cover) across 33 acres within the project

limits. Where appropriate, the use of native plant material would be preferred to non-native drought tolerant selections. Additionally, the existing irrigation system would be removed and replaced with more efficient irrigation technology. These improvements would include replacement of backflow prevention devices, flow sensors, control valves, and sprinkler heads. The existing automatic irrigation controllers would be replaced with Remote Control Irrigation Systems (RICSs) to provide remote monitoring of system status and scheduling.

Consistent with Caltrans guidance, the Roadside Rehabilitation would require a minimum Plant Establishment period of seven-hundred fifty (750) working days with separate Extended Establishment of Planting (EEP) project.

Work related to paving narrow areas, paving beyond the gore, mast arm ramp meter installation, and slope paving, would require disturbance of roadside areas and result in removal and/or disturbance of existing vegetation and damage to irrigation system components. This rehabilitation of the roadside would require replacement of highway planting items and/or installation of inert materials to ensure soil stabilization and to minimize erosion. The work would include repair and/or replacement of existing irrigation system components damaged during construction.

Safety

Worker Safety

The improvement and incorporation of roadside worker safety performance objectives would reduce the frequency and duration of maintenance worker exposure to vehicular traffic. This would be accomplished through the identification and development of safe access locations to the facility, and/or the reduction or elimination of regular maintenance within the roadside areas.

Overhead Sign and Roadside Sign Replacement

The proposed improvement to safety includes replacement of existing 53 sign panels and 16 overhead sign panels to meet current State Policy and standards for minimum levels of reflectivity and high visibility.

Guardrails

The proposed project includes replacing 13,369 linear feet of existing metal beam guardrails. The guardrail installations would be updated to current State standards using the Midwest Guardrail System (MGS).

Complete Streets

The proposed project would improve bicycle access and safety through local streets within the project limits. Bicycle improvements are planned at 16 locations, which are under study to include feasible enhancement to be included in the final project. Implementing these improvements would enhance bicycle access in these areas and would contribute towards meeting

the State and regional efforts in increasing biking and reducing Vehicle Miles Travelled (VMT). This project would include a bike trail, bicycle bridge, and Class II, III, and IV bicycle facilities.

Bike Trail Facility

The new bike trail would begin at the northeast corner of the northbound entrance ramp at Palm Avenue and end at the northeast corner of Main Street northbound exit ramp. Minor modifications would be required at the northeast corner of Palm Avenue intersection to allow for a bike trail entrance to be constructed. The bike facility would continue to the north, parallel to the northbound I-805 freeway. A bicycle bridge would be constructed to cross the Otay River and terminate at the northern limits of the I-805 southbound exit ramp to Main Street. Access would be available at the southeast corner of the intersection. Minor modifications would be required at the southeast curb return to allow for a bike trail intersection to be constructed.

Both entrances would accommodate bicycles, maintenance vehicles, sweeper vehicles, and emergency vehicles to access to the bike facility and areas east of the project. The entrances would provide signs indicating steep grades ahead and for bicyclists use only. The entrances would include steel bollards with padlocks to prevent unauthorized motorized vehicles on the bicycle facility. The bike trail would need a bicycle bridge to enable users to cross the Otay River. The project proposes to connect the bike trail facility to existing trails located east of the I-805 on the north and south sides of the river.

Bicycle Bridge

Within the Build Alternative there are two variations for a bicycle bridge over the Otay River, parallel to the existing Otay River Bridge (Br No. 57-631R).

Hanging Bicycle Bridge (Variation 1)

The proposed hanging bicycle bridge would hang from the existing I-805 northbound bridge and be approximately 30 feet above the riverbed. The proposed bridge would be 347-feet long and 14-feet wide, and connected via suspender cables underneath the existing Otay River Bridge. This hanging bicycle bridge would require construction of two retaining walls to accommodate bike trail construction and uphold the slope structure. The project proposes to add LED pedestrian lighting at the bike trail. Lighting would be shielded and directed toward the path of travel, augment the ambient light from nearby freeway and street lighting, and consist of “wayfinding pools” of low-level light. Lighting would rely on low path lights, wall washing lights, and accent up lights to provide a low-level ambient effect.

Figure 1-3: Proposed Hanging Bicycle Bridge Simulation

Multi-Span Bicycle Bridge (Variation 2)

The proposed multi-span bicycle bridge would be constructed next to the existing I-805 northbound bridge and would be approximately 34 feet above the riverbed. The proposed bridge would be 410-feet long and 14-feet wide and run parallel to the existing Otay River Bridge. It would be approximately 19 feet east of the existing Otay River Bridge. Three support piers would be placed into the riverbed approximately 108 feet apart. The bridge would have four-foot-tall cable handrails and would require the construction of two retaining walls to accommodate bike trail construction and uphold the slope structure. The project proposes to add LED pedestrian lighting at the bike trail. Lighting would be shielded and directed toward the path of travel, augment the ambient light from nearby freeway and street lighting, and consist of "wayfinding pools" of low-level light. Lighting would rely on low path lights, wall washing lights, and accent up lights to provide a low-level ambient effect.

Figure 1-4: Proposed Multi-Span Bicycle Bridge Simulation

Conflict Zone Green Paint

This project includes 100 locations of green thermoplastic paint to raise motorist and bicyclist awareness to potential areas of conflict.

Crosswalks

This project includes 21 locations of continental crosswalk striping. The continental crosswalks are longitudinal stripes designated to guide pedestrians on where to cross at intersections. These high visibility markings provide a visual cue for vehicles and bicyclists of where to expect pedestrians.

Bike Box

This project includes two bike box locations: San Ysidro Boulevard and Main Street. The bike boxes are used to provide space and increase visibility of bicyclists to minimize conflicts with vehicles making a right turn on to the entrance ramps.

Construction and Staging Areas

Construction activities and construction areas, such as staging and laydown areas, would be located within Caltrans right-of-way. Staging and laydown areas could include lanes where construction is occurring, as well as existing Caltrans maintenance yards located under and/or adjacent to the interstate.

Table 1.4.1-1: Proposed Assets of the Build Alternative

CATEGORY	ASSET	QUANTITY
Pavement	FULL LANE REPLACEMENT	8.43 Lane Miles
Pavement	RSC INDIVIDUAL SLAB REPLACMENTS	0.39 Lane Miles
Pavement	GRINDING	31.92 Lane Miles
Pavement	MAINLINE EXISTING SHOULDERS	13.56 Lane Miles
Pavement	RAMP PAVEMENT REHABILITATION	8.21 Lane Miles
Bridge	APPROACH SLABS	78,386 Square Feet
Drainage	CULVERT REHABILITATION (30 culverts and 14 end treatments)	5,615 Linear Feet (44 Locations)
Drainage	NEW CULVERTS (due to a new bike trail and three auxiliary lanes)	2,354 Linear Feet (47 Locations)
Safety	SIGN PANEL REPLACEMENT	53 Each
Safety	OVERHEAD SIGN STRUCTURE REHABILITATION	16 Each
Safety	MIDWEST GUARDRAIL UPGRADES	13,369 Linear Feet (26 Locations)
Roadside	PLANTING (IRRIGATED)	33 Acres
Miscellaneous Facilities	PAVING BEYOND THE GORE	29 Locations
Miscellaneous Facilities	PAVING NARROW AREAS	7 Locations
Miscellaneous Facilities	MAST ARM RAMP METER	4 Locations
Miscellaneous Facilities	SLOPE PAVING	4 Locations
Miscellaneous Facilities	MAST ARM RAMP METER	4 Locations
Mobility	CENSUS STATION	3 Each
Mobility	CHANGEABLE MESSAGE SIGN	2 Each
Mobility	CCTV	7 Each
Mobility	COMMUNICATION – FIBER OPTICS (Installation underneath shoulder on the northbound direction)	11.8 Miles
Mobility	COMMUNICATION HUB	2 Each
Mobility	TMS	4 Each
Mobility	RAMP METER	3 Each
Mobility	TRAFFIC SIGNALS	13 Each
Mobility	CURB RAMPS (Repair/Upgrade)	34 Each
Mobility	DAILY VEHICLE HOURS OF DELAY REDUCED (DVHD)	3 Auxiliary Lanes
Complete Streets	BIKE TRAIL	0.75 Miles
Complete Streets	CLASS II BIKE PATH	2.72 Miles
Complete Streets	CLASS III BIKE PATH	0.69 Miles
Complete Streets	CLASS IV BIKEWAY	0.83 Miles
Complete Streets	CONFLICT ZONE GREEN PAINT	100 Each
Complete Streets	CROSSWALKS	21 Each
Complete Streets	BIKE BOX	2 Each

1.4.2 No-Build (No-Action) Alternative

The No-Build Alternative provides a baseline for considerations of the Build Alternative. It may be preferred if the other alternatives or variations proposed have substantial impacts to the environment, do not serve the project's purpose and need, or are not economically feasible.

The No-Build Alternative retains the existing conditions of the facility and would not address the purpose and need of the project. This alternative would not rehabilitate the identified deteriorating assets, improve mobility throughout the corridor, improve driver and worker safety, or enhance mobility and complete streets.

1.5 Standard Measures and Best Management Practices Included in All Build Alternatives

This project would incorporate standardized project measures and Best Management Practices (BMPs) which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2.

- The construction contractor must comply with the San Diego Air Pollution Control District (SDAPCD) Rule 55 and Caltrans' Standard Specifications (14-9). Section 14-9 includes specifications requiring compliance with applicable laws and regulations related to air quality, including air pollution control district, and air quality management district regulations and local ordinances. Per Section 14-9, waste or material generated from construction activities would not be disposed of by burning.
- Water or dust palliative would be applied to the site and equipment as often as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emissions or at the right-of-way line, depending on local regulations.
- The construction contractor must comply with SSP *14-11.13 Disturbance of Existing Paint Systems on Bridges* to properly handle potential lead disturbances with removal of paint.
- Construction equipment and vehicles would be properly tuned and maintained, and would use low sulfur fuel as required by California Code of Regulations Title 17, Section 93114.

- Equipment and materials storage sites would be located as far away from residential and park uses as feasible, and construction areas would be kept clean and orderly.
- To the extent feasible, construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Intelligent transportation systems and TMS elements would be implemented to smooth traffic flow and increase efficiency.
- TMS elements would be solar powered to the maximum extent feasible.
- The construction contract shall utilize alternative fuels such as renewable diesel for construction equipment when feasible.
- The contractor shall implement an idling limit of 5 minutes for delivery trucks and other diesel-powered equipment (with some exceptions).
- The contractor shall schedule truck trips outside of peak morning and evening commute hours and implement a TMP to minimize the effects to traffic.
- The construction contractor shall reduce construction waste.
- The contractor shall encourage improved fuel efficiency from construction equipment through ensuring that construction equipment is maintained and properly tuned and equipment has been correctly sized for the job.
- The contractor shall provide construction personnel with the knowledge to identify environmental issues and best practice methods to minimize impacts to the human and natural environment. Contractor shall supplement existing training with information regarding methods to reduce greenhouse gas emissions related to construction.
- A Debris Containment and Collection Plan under SSP *14-11.13B(2)* would be required.
- A lead compliance plan would be required during construction requiring paint disturbance.
- An asbestos-containing materials survey would be conducted to determine if the bridge structure contains asbestos. If it is determined asbestos is present, further action would be required per Caltrans standard construction practices.
- A written notification to the SDAPCD would be provided under SSP *14-9.02 Air Pollution Control* (NESHAP [National Emission Standards for Hazardous Air Pollutants] notification) to inform the local air district of proposed construction activities.

- Minimization measures to ensure traffic impacts resulting from construction activities would be implemented with the TMP including appropriate staging, timing, and sequencing of activities; maintenance of traffic in both directions; and advanced notification to motorists and nearby communities to inform the public of potential delays.
- Prior to construction activities, Caltrans would contact utilities, DigAlert services, and/or other applicable entities to mark underground facilities, as needed.
- Emergency service providers and first responders would be notified of construction sequencing and the potential for temporary lane closures and/or changes to traffic circulation, as identified in the TMP.

1.6 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with CEQA and other state laws and regulations. Separate environmental documentation, supporting a Categorical Exclusion determination, has been prepared in accordance with NEPA. When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service—that is, species protected by the Federal Endangered Species Act).

1.7 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications are required for project construction:

Agency	Permit/Approval	Status
United States Army Corps of Engineers	Section 404 of the Clean Water Act - Permit	Would be obtained during the Plans, Specifications, and Estimates phase.
San Diego Regional Water Quality Control Board	Section 401 of the Clean Water Act - Permit	Would be obtained during the Plans, Specifications, and Estimates phase.
CA Department of Fish and Wildlife	1602 Lake and Streambed Alteration Agreement	Would be obtained during the Plans, Specifications, and Estimates phase
US Fish and Wildlife Service	Biological Opinion	Received 12/16/2022

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant Impact With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project would indicate that there are no impacts to a particular resource. A "No Impact" answer reflects this determination. The questions in this checklist 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 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.

"No Impact" determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report, and no further discussion is included in this document.

2.1.1 Aesthetics

Considering the information in the Visual Impact Assessment dated December 2, 2022, the following significance determinations have been made:

Except as provided in Public Resources Code Section 21099, would the project:

Question—Would the project:	CEQA Significance Determinations for Aesthetics
a) Have a substantial adverse effect on a scenic vista?	**No Impact**
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Aesthetics
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?	**No Impact**
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	**Less Than Significant Impact**

Affected Environment

The primary focus of the 14.5-mile project is pavement and asset rehabilitation, which would cause minimal effect on the visual environment of the I-805 corridor. In addition, a bike trail is proposed in the southern segment of the project corridor. It would extend from Palm Avenue overcrossing on the south to Main Street UC on the north. The proposed bike trail has two bridge variations: “Hanging Bridge” and “Multi-Span Bridge.”

The existing visual character of the project area reflects a combination of suburban residential and commercial uses linked by the freeway with varying degrees of open and dense roadside landscape. The open areas along the freeway yield to foreground views of hillsides and adjacent development while others have distant mountain views. The confined areas tend to be defined by manufactured slopes with landscape treatments ranging from roadside parkway on the northern section of the corridor to sparse landscape elsewhere.

The primary visual character is defined by the built environment of the freeway itself with its interchanges, sound walls, retaining walls, adjacent shopping centers and numerous homes along with the more limited natural environment of the Sweetwater River basin, Otay River basin, and the distant views.

The overall existing visual quality of the I-805 South corridor is moderate. This is due primarily to the high concentration of built environment and the generally limited natural, open character. Quality ranges from high in some areas where there are dramatic distant views and natural features with mature roadside landscaping, to areas that are relatively low where there is an abundance of visible adjacent development with limited roadside

amenities. As a suburban freeway within a developed area, 805 has several attractive viewing experiences, but in general would not be considered a scenic highway.

Environmental Consequences

The visual quality of the existing corridor would be minimally altered by the proposed 14.5-mile asset rehabilitation project. However, at spot locations and at the bike bridge location, visual quality would change due to tree removal and construction of retaining walls.

The proposed bike trail would be in the southern segment of the project corridor. It extends from Palm Avenue on the south to Main Street on the north. The northeast corner of Palm Avenue intersection would be modified for a bike trail entry. The trail would continue to the north, parallel to the NB 805 freeway and cross the Otay River via a new bike bridge. The trail would end near the I-805 NB exit ramp to Main Street. The trail entry may include enhanced paving, seating, lighting, and trail signage.

Visual impacts would be caused by the removal of existing trees and landscaping. The prominence of tall trees near the freeway would be permanently lost between the proposed bike trail and the freeway due to space constraints. Pavement widening at the proposed auxiliary lanes would displace landscape area and reduce the area that trees could be replanted.

The proposed bike trail and bridge crossing would improve the current circulation patterns for cyclists. The bike trail and associated retaining walls would be below the freeway and not impact offsite views for freeway users. The bike trail bridge would benefit trail users with scenic views at the Otay River crossing. The forms, textures, and colors chosen for the structures, hardscape and plant palette would blend with the muted earth tones and textures already present on the site.

The project would be constructed within the limits of existing Caltrans right-of way, which would restrict the use of landform alteration to replace existing freeway side slopes in kind. Instead, retaining walls would be required to accommodate freeway widening. To reduce visual impacts, new retaining walls would incorporate the 805 corridor aesthetic themes. The retaining walls and the removal of the existing eucalyptus stands would be effectively reduced by the minimization measures described. The walls would be given a more human scale with the application of surface textures, and architectural elements where appropriate. The removal of the eucalyptus trees would be compensated by new trees, shrubs, and groundcover planted throughout all disturbed landscape areas. This new planting would refresh existing planted areas which have gone without extensive maintenance or plant replacement for many years.

Proposed trail lighting would augment the ambient light from nearby freeway and street lighting. Trail lighting would consist of “wayfinding pools” of low-level light. Lighting would rely on low path lights, wall washing lights, and accent up lights to provide a low-level ambient effect. Fixtures with hidden light sources would be used wherever possible. Pole lights would be a pedestrian-friendly ten or twelve feet in height and fixtures would be LED, be shielded, and be maximum 3000 Kelvin.

Variation 1: Hanging Bridge (Figure 1-3)

The bridge would hang from the existing I-805 northbound bridge and be located between the bridge columns. The new bridge would be 347 feet long, 14 feet wide and would be approximately 30 feet above the riverbed. The bridge would be constructed of precast segments suspended by cables attached to the bottom of the existing freeway bridge.

The proposed bike bridge is visually subordinate to the freeway bridge due to its location under the existing 805 bridge and would complement the clean lines of the existing bridge because the bridge deck is parallel to the freeway bridge. The bridge would not encroach into the existing riverbed and views to river vegetation would remain unchanged. However, views to the freeway at each end of the bridge would change, as the existing freeway slopes with chain link fence and scattered trees would be replaced by new retaining walls that support the bike trail.

The overall visual impact would be low due to the positive change in visual quality combined with the positive response by future trail viewers.

Variation 2: Multi-Span Bridge (Figure 1-4)

The multi-span bicycle bridge would be parallel to the existing I-805 bridge over the Otay River. The proposed bridge would be 410-feet long and 14-feet wide. It is approximately 19 feet east of the existing freeway bridge and about 34 feet above the riverbed.

The new bridge and retaining walls would form a continuous, straight line across the riverbed and become the dominant feature in the viewshed. Views to the freeway would change as the bridge would encroach into the existing riverbed and decrease the spatial envelope around the trail, and the existing freeway slopes and trees would be replaced by new bike trail retaining walls.

The existing river character would become more urban at this spot location, and the resulting visual quality would remain moderate-low.

No-Build Alternative

The No-Build Alternative would not involve construction along the project limits. The current structure and facilities would not improve, no bike bridge would be added, and no impacts would occur.

Avoidance, Minimization, and/or Mitigation Measures

With the implementation of the minimization measures below, the proposed project features would have only a low to moderate impact on the existing quality and character of the existing corridor; therefore, no impacts would occur. The following measures to avoid or minimize visual impacts would be incorporated into the project:

- The bike trail bridge structure aesthetics should be compatible with the adjacent bike trail retaining walls and railing. Provide adequate lighting of the bikeway.

- Bike Trail retaining walls would be integrally colored tan concrete and include textured relief patterns and architectural details.

- Trail fencing would be set back from the trail as far as possible. Bike trail railing and fencing would be low-profile, see-through and have earth toned colors. Low fencing would be dark colored cable barrier railing, or chain-link fencing. The use of six-foot-high standard chain link fencing would be avoided.

- Trail lighting would augment the ambient light from nearby freeway and street lighting. Trail lighting may consist of “wayfinding pools” of low-level light. Lighting would rely on low path lights, wall washing lights, and accent up lights to provide a low-level ambient effect. Fixtures with shielded light sources would be used wherever possible. Pole lights would be a pedestrian-friendly ten or twelve feet in height. Poles or bollards would be dark brown or dark bronze in color. Fixtures would be LED, be shielded, and be maximum 3000K (color). Permanent project lighting would be of the lowest illumination necessary for safety and would be directed towards the bridge and paved roadways, and away from sensitive habitats. Light glare shields would be used to reduce the extent of illumination into sensitive habitats. Caltrans will review the permanent lighting plans for the project and submit them to CFWO.

- Provide entry nodes at bike trail entries from local streets. The entry node may include enhanced paving, seating, pedestrian scaled lighting, and trail orientation maps and signage.

- Where space allows, the bike trail would be separated from the freeway horizontally and vertically to provide space for new tree and shrub buffer plantings.

- Bridge widening at the Federal Blvd undercrossing will include slope paving that would be colored and textured to match the existing paving.

- Project retaining walls shall be integrally colored tan and articulated with varied reveal and relief patterns by using texture changes and

architectural details. Walls shall be compatible with the 805 South Corridor aesthetic themes.

- Beyond Gore Paving (BGP) and narrow paved areas shall be integrally colored tan concrete with an exposed aggregate finish. The concrete color would be Davis Colors: Palomino #5447; Scofield Colors: Sombrero Buff #C-25; or Solomon Colors: #288 Straw. Guardrails, if proposed within BGP areas, shall include tan colored concrete vegetation control that is colored to match the BGP.

- New concrete headwalls, channels, ditches, and aprons would be colored tan.

- Biofiltration swales, if proposed, shall appear as natural landscape features (streambeds) and be sodded with irrigated native grass sod.

- Seed mixes for native revegetated areas shall be designed with consultation from the District Biologist. If non-irrigated hydroseed is used, it shall be applied in the seasonal rain window.

- Protect vegetation outside of the grading limits and contractor use areas by designating these areas as “Landscape Protection Areas”. No equipment, material storage, or vehicles are allowed under the dripline of trees. Avoid trenching under tree canopies to preserve existing trees.

2.1.2 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 Department 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.

Question—Would 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**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	**No Impact**
c) Conflict with existing zoning, 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**
d) Result in the loss of forest land or conversion of forest land to non-forest use?	**No Impact**
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**

Discussion of Environmental Evaluation Questions

The project would occur within existing developed Caltrans right-of-way and would not convert farmland to non-agricultural use; conflict with existing zoning for agricultural use, forest use, or a Williamson Act contract; result in the loss of forest land or conversion of forest land to non-forest use; or involve other changes to the existing environment that would result in conversion of farmland to non-agricultural use or forest land to non-forest use. Therefore, no impacts would occur to agricultural and forest resources.

2.1.3 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.

Considering the preliminary air quality assessment conducted by Caltrans, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Air Quality
a) Conflict with or obstruct implementation of the applicable air quality plan?	**Less Than Significant Impact**
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**
c) Expose sensitive receptors to substantial pollutant concentrations?	**Less Than Significant Impact**
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	**Less Than Significant Impact**

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 is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (USEPA) and 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). At the state level, these standards are called California Ambient Air Quality Standards (CAAQS). NAAQS and CAAQS have been established for six criteria pollutants that have been linked to potential health concerns (shown in Table 2 below): carbon monoxide (CO); nitrogen dioxide (NO_2); ozone; 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, the CAAQS also include standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The NAAQS and CAAQS 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 frameworks also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Table 2-1-3-1: Criteria 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 volatile organic compounds (VOCs) may also contribute.	Low-altitude ozone is almost entirely formed from reactive organic gases (ROGs) or VOCs 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 and other aerosol and solid compounds are part of PM_{10}.	Dust- and fume-producing industrial and agricultural operations; combustion smoke and 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 and 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 ROGs.
Nitrogen Dioxide (NO_2)	Irritating to eyes and respiratory tract. Colors the atmosphere reddish-brown. Contributes to acid rain and 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.

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
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.
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

Affected Environment

The proposed project site is located in San Diego County within the San Diego Air Basin (SDAB). Air quality in the SDAB is regulated by USEPA, ARB, and SDAPCD. Each of these agencies develops rules, regulations, or policies, and/or goals to attain the directives imposed through legislation.

SDAPCD regulates most air pollutant sources, except for motor vehicles, marine vessels, aircraft, and agricultural equipment, which are regulated by ARB or USEPA. Included in SDAPCD's tasks are monitoring of air pollution, preparation of the State Implementation Plan (SIP) for the SDAB, and promulgation of rules and regulations. Although USEPA regulation may not be superseded, both state and local regulations may be more stringent.

USEPA has delegated responsibility to air districts to establish local rules to protect air quality. Caltrans' Standard Specification 14-9.02 (Caltrans 2018) requires compliance with applicable air quality laws and regulations including local and air district ordinances and rules.

Both USEPA and ARB use ambient air quality monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. An "attainment" designation for an area signifies that pollutant concentrations did not exceed the established standard.

Table 2.1.1-2 shows attainment designations for the SDAB. The SDAB currently meets the NAAQS for most criteria air pollutants except ozone and meets the CAAQS for most criteria air pollutants except ozone, PM_{10}, and $PM_{2.5}$. The SDAB is currently designated as a Serious Nonattainment Area for the 2008 ozone NAAQS and a Moderate Nonattainment Area for the 2015 ozone NAAQS.

ARB is the lead agency responsible for developing the SIP in California. Local air districts and other agencies prepare air quality attainment plans or air quality management plans, and submit them to ARB for review, approval, and incorporation into the applicable SIP. The SIP includes strategies and tactics to be used to attain the federal ozone standard in the county. The SIP elements are taken from the Regional Air Quality Strategy (RAQS), which SDAPCD prepares. The 1991/1992 RAQS was adopted on March 27, 1992, and includes Transportation Control Measures (TCMs) for the air quality plan prepared by the San Diego Association of Governments (SANDAG). The required triennial updates of the RAQS and corresponding TCMs were adopted in 1995, 1998, 2001, 2004, 2009, and 2016. The 2016 RAQS Revision, which identifies emission control measures to provide expeditious progress toward attaining the state ozone standard, was adopted by SDAPCD in December 2016 (SDAPCD 2016). The rules and regulations include procedures and requirements to control the emission of pollutants and to prevent adverse impacts.

Table 2.1.3-2: San Diego Air Basin Attainment Status

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	Attainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM10	Unclassifiable	Nonattainment
PM2.5	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

Notes:
The federal ozone (1-hour) standard of 12 parts per million was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because this benchmark is addressed in State Implementation Plans.
Source: Attainment Status (sdapcd.org), 2022.

Environmental Consequences

Proposed Project

Construction activities for the proposed project would generate temporary emissions of VOCs, nitrogen oxides (NOX), CO, sulfur oxides (SOX), PM10, and PM2.5. Ozone is a regional pollutant derived from NOx and VOCs in the presence of sunlight and heat.

Construction-related effects on air quality from the proposed project would be greatest during preparation and mobilization of equipment and materials to the project site due to engine emissions associated with these efforts. SO_2 is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Under California law and ARB regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel (not more than 15 parts per million sulfur), so SO_2-related issues due to diesel exhaust would be minimal. Construction impacts to air quality are short term in duration and, therefore, would not result in long-term adverse conditions or 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.

Emissions associated with construction of the proposed project are shown in Table 2.1.3-3 and compared to the SDAPCD Air Quality Impact Analysis (AQIA) Trigger Levels in Regulation II, Rule 20.2, which are applicable to new or modified stationary sources. Although these trigger levels do not generally apply to mobile sources and construction activities, for comparative purposes these levels may be used to evaluate the increased emissions and demonstrate that a project's emissions would not result in a significant impact on air quality (County of San Diego 2007).

Table 2-1-3.3: Daily Construction Emissions

Phase	Total Organic Gasses	Reactive Organic Gasses	CO	NOx	PM_{10}	$PM_{2.5}$
Daily Average (lbs/day)	12.1	11.2	56.9	78.9	6.6	5.6
Project Maximum Daily Emissions (lbs/day)	25.3	23.5	160.4	165.7	14.8	12.7
Threshold of Significance [1]	--	--	550	250	100	67
Significant Impact?	--	--	No	No	No	No

Notes:
TOG = Total Organic Gasses; VOCs = volatile organic compounds; NO_X = nitrogen oxides; CO = carbon monoxide;
PM_{10} = particles 10 micrometers or smaller; $PM_{2.5}$ = particles 2.5 micrometers or smaller
[1]SDAPCD Air Quality Impact Analysis Trigger Levels in Regulation II, Rule 20.2
Source: Caltrans

As shown in Table 2-1-3.3, construction-related emissions would not exceed the SDAPCD AQIA trigger levels. Construction impacts to air quality are short term in duration and, therefore, would not result in long-term adverse conditions or 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.

Consistency with the RAQS and SIP is based on whether the project would exceed the estimated air basin emissions, which are based in part on projections of population and vehicle miles traveled (VMT). An increase in VMT beyond projections in local plans could result in a significant adverse incremental effect on a region's ability to attain or maintain the NAAQS and CAAQS. The proposed project would not alter the roadway capacity, traffic volumes, vehicle fleet mix, or VMT in the region, as the proposed auxiliary lanes would each be at less than one mile in length. The proposed project would reduce emissions by improving traffic operations, operational efficiencies and enhancing multimodal options. The proposed three auxiliary lanes and upgrades to TMS would improve traffic operations and operational efficiencies. The proposed auxiliary lanes, with each segment proposed at less than one mile in length, would be added in areas that have been

identified to have high DVHD. High DVHD indicates a high amount of vehicular traffic traveling under 35 miles per hour which produces the highest levels of emissions. Adding the auxiliary lanes would reduce the DVHD by easing merging and improving travel speeds.

Improvements to TMS would allow for operational efficiencies by providing real-time traffic and performance data. Existing TMS are at the end of their service life. Upgrades to closed circuit television (CCTV) systems, fiber optic systems, vehicle detection, traffic monitoring stations, ramp meters, traffic signals would continue to inform future operational needs and identify deficiencies.

In addition, the project would incorporate active transportation that would increase multi-modal options and may reduce vehicular travel and vehicle miles traveled. Existing curb ramps do not meet current standards. The project proposes to upgrade the existing curb ramps to allow for ease of use and access. This improvement would create accessibility and promote walking as an alternate form of travel which has the potential to lessen emissions and improve air quality.

Further, proposed bicycle facilities would add alternate routes for cyclists. Proposed Class II, III, and IV facilities would enhance the multi-modal transportation network. Currently, connectivity across the Otay River in the City of Chula Vista is done by sharing the I-805 bridge with vehicular traffic. A dedicated bicycle bridge is proposed to improve safety and may incentivize more cyclist to use the alternate method of transit, which would lessen air quality impacts by lowering emissions.

Therefore, the proposed project would not conflict with the applicable air quality plan, result in a cumulatively considerable net increase of any criteria pollutant, expose sensitive receptors to substantial pollutant concentrations, or result in other emissions such as those leading to odors. In addition, the proposed project would comply with construction standards adopted by the SDAPCD as well as Caltrans standardized procedures for minimizing air pollutants during construction (as detailed below). Furthermore, the addition of three auxiliary lanes, upgrades to Transportation Management Systems, and enhancements to pedestrian and cyclist connectivity may result in improved air quality due to decreased congestion. Therefore, impacts would be less than significant.

No-Build Alternative

The No-Build Alternative would not involve construction along the project limits, the current structure and facilities would not improve, no bike bridge would be constructed, and auxiliary lanes would not be constructed. Air quality would not improve as compared to existing conditions.

Avoidance, Minimization, and/or Mitigation Measures

To ensure potential temporary effects to air quality during construction are minimized, the following avoidance and minimization measures would be implemented, along with standard operating procedures discussed in Chapter 1, Standard Measures and BMPs:

- The construction contractor must comply with the SDAPCD Rule 55 and Caltrans' Standard Specifications (14-9). Section 14-9 includes specifications requiring compliance with applicable laws and regulations related to air quality, including air pollution control district, and air quality management district regulations and local ordinances. Per Section 14-9, waste or material generated from construction activities would not be disposed of by burning.

- Water or dust palliative would be applied to the site and equipment as often as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emissions or at the right-of-way line, depending on local regulations. Dust minimization measures would be adhered to, as applicable.

- The construction contractor must comply with SSP 14-11.16 Asbestos Containing Construction Material in Bridges to ensure safety, minimize exposure risks, and reduce potential air quality impacts that may result from the handling of asbestos.

- Construction equipment and vehicles would be properly tuned and maintained, and would use low sulfur fuel as required by California Code of Regulations Title 17, Section 93114.

- Equipment and materials storage sites would be located as far away from residential and park uses as feasible, and construction areas would be kept clean and orderly.

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

2.1.4 Biological Resources

Considering the information in the Biological Analysis dated February 2022 and the Biological Opinion dated October 13, 2022, the following significance determinations have been made:

Question—Would the project:	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 National Oceanic and Atmospheric Administration Fisheries?	**Less Than Significant Impact**
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 Impact With Mitigation Incorporated**
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?	**Less Than Significant 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?	**Less Than Significant Impact With Mitigation Incorporated**
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**Less Than Significant Impact**
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**

Regulatory Setting

Special-status species, for the purposes of this assessment, are those species listed as threatened or endangered under CESA, as well as state fully protected, state rare, and state species of special concern; species listed as threatened or endangered under the FESA, federal proposed, federal candidate, and federal species of concern; and species afforded federal protection under the Migratory Bird Treaty Act (MBTA).

CESA is a California environmental law intended to conserve, protect, restore, and enhance any species listed as endangered or threatened and its habitat (Fish and Game Code, section 2052). A state-listed species, or any part or product of the plant or animal, may not be imported into the state of California; exported out of the state; or taken, possessed, purchased, or sold within the state without proper authorization (Fish and Game Code, section 2080).

The purpose of FESA is to conserve the ecosystems upon which threatened and endangered species depend and to conserve and recover listed species. Section 7 of FESA requires federal action proponents to consult with USFWS to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat. No critical habitats are present within the proposed project area.

Birds, both migratory and most native-resident bird species, are protected under the MBTA. Under the MBTA, it is unlawful by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, [or] possess migratory birds or their nests or eggs at any time, unless permitted by regulation.

Affected Environment

Most of work for the proposed project would occur within the highway alignment, along the highway shoulder, and within the road prism. However, several locations are located beyond these areas, and would affect sensitive habitat types. There are no federally designated critical habitats within or adjacent to the Biologically Sensitive Areas (BSA).

The project area is dominated by urban/developed land. Ornamental plantings, including eucalyptus trees (*Eucalyptus spp*.), iceplant (*Carpobrotus edulis*), acacia (*Acacia cyclops*), and nonnative grasses are the predominant vegetation types. Small areas of native habitat are also located in the project area, specifically coastal sage scrub, chaparral, and riparian areas, including southern riparian scrub/forest, freshwater marsh and riverine wetlands. The biological communities within the BSA have been fragmented by development, connectivity to the east and west has been limited by I-805, other intersecting highways and arterials, and general development of the area.

According to 50 CFR Section 402.02 pursuant to section 7 of the Endangered Species Act of 1973, the “action area” means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the project. Subsequent analyses of the environmental baseline, effects of the project, and levels of incidental take are based upon the action area. For this project, the action area is defined as the project impact area along I-805 in the cities of San Diego, Chula Vista, and National City, San Diego County, and surrounding habitat within about 500 feet, which may be exposed to

project-related effects such as increased noise, light, dust levels and human activity during project construction. The action area is located along I-805, which crosses the Otay River. There are twelve habitat types within the study area, totaling approximately 1,054 acres. Habitat types in the vicinity of the project include southern cottonwood-willow riparian forest, freshwater marsh, riverine, coastal sage scrub, chaparral, and urban/developed land.

As discussed in the Biological Analysis, 20 federally listed plant and animal species were identified in the federal species lists obtained for the project. A No Effect determination was made for the 18 additional federally listed plant and animal species identified in the federal species lists obtained for the project. When analyzing and surveying the action area, it was determined that suitable habitats are absent for these species and/or the action area is outside of the known current range of these species. The California gnatcatcher and least Bell's vireo are known to occur within and adjacent to the action area and may be temporarily impacted during the proposed project construction, as discussed below.

Status of Sensitive Plants/Animal

An effort was undertaken to determine the potential for sensitive plants and animals in the action area. Based on habitat, a search of the CNDDB and official species list received from USFWS, the action area has the potential for the federally listed bird species least Bells' vireo and California gnatcatcher. Approximately 1.14 acres of potential nesting habitat for vireo occurs within the direct impact area for the project (Caltrans 2022). Accordingly, protocol vireo surveys were conducted within the action area in 2022. Two male vireos (representing two pairs) were observed. The California gnatcatcher is known to occur within coastal sage scrub, disturbed coastal sage scrub, and would also forage in adjacent habitats. Gnatcatchers have been detected within the action area, specifically adjacent to the project area southeast of the Palm Avenue access ramp to northbound 805. However, there is no designated Critical Habitat for California gnatcatcher within the action area, Biological Study Area, or adjacent areas.

Environmental Consequences

Proposed Project

Activities that are likely to affect sensitive species include construction of bike bridge; erosion control, clearing, grubbing, and preparing soils; constructing temporary access roads; slope grading, excavation work; relocating (undergrounding) utilities, reconstructing drainage structures; and restoring temporary impact areas (e.g., revegetation).

Most of work for the proposed project would occur within the highway alignment; however, approximately 0.88 acres of coastal sage scrub and 0.65 acres of southern cottonwood-willow forest would be temporarily impacted

during access to work location to construct the bike bridge over the Otay River and repair culverts at the Palm Avenue northbound onramp.

The project would result in temporary impacts to riparian habitat and permanent impacts to riparian habitat suitable for vireo breeding and foraging, resulting from the construction of a bike bridge over the Otay River. The bike bridge may be constructed either as a hanging bridge under the roadway or as a pier bridge (Multi-Span and Stand-Alone) east of the roadway. The hanging bridge (Variation 1) would result in 0.44 acre of temporary impacts to riparian habitat and no permanent impacts, while the pier bridge (Variation 2) would result in 1.14 acres of temporary impacts to riparian habitat and 0.0009 acre of permanent impacts from bridge piers in the Otay River valley. Construction of the bike bridge would take approximately 7 months.

Least Bell's Vireo

Under Variation 2 for the I-805 South bike bridge over the Otay, the project would permanently affect 0.0009 acres and temporarily affect 1.14 acres of suitable vireo habitat. Compensatory mitigation measures to be incorporated during construction would lessen potential impacts to their habitat; therefore, vireo adults, eggs, or nestlings are not expected to be directly killed or injured due to the proposed project. However, vireo pairs usually return to the same breeding territory each year, and the removal would force the pair to expand their existing territory or establish a new territory. Displaced vireos may be forced to compete with resident vireos when attempting to expand an existing territory or establish a new territory.

Vireos would be subject to disturbance from construction activities, as some project work would be conducted at night with construction lighting that would affect the adjacent vireo habitat. Permanent light fixtures would also be installed on the bike bridge over the Otay River. Light that alters natural light patterns in ecosystems can lead to increased predation, disorientation, and disruption of species interactions. The proposed project would incorporate measures to minimize the effects of lighting on vireos. All nighttime construction lighting and nighttime lighting of the completed project would be of the lowest illumination necessary for human safety, directed at the immediate work area, and away from adjacent sensitive habitats. Light glare shields would be used to reduce the extent of illumination into sensitive habitats. With implementation of these measures, it is anticipated that the effects of lighting on vireos would be minimized to the point where such effects are less than significant.

Noise and vibrations associated with the use of heavy equipment during project construction have the potential to disrupt vireo behaviors in adjacent habitat by masking intraspecific communication and startling birds. While measures are designed to minimize noise impacts to nesting vireos, there is the possibility that high noise levels may result from project construction work during one vireo breeding season. This noise could result in displacement

and reproductive loss for the vireo pairs if they successfully establish a new territory nearby. Displaced vireos may also be subjected to increased predation, death, or injury and may not be able to find sufficient nearby habitat or may be forced to compete with other vireos when attempting to expand an existing territory or establish a new territory.

Project construction may increase fugitive dust, pollution, and siltation in the adjacent habitat as a result of grading, sediment moving, and operation of heavy equipment in proximity to the Otay River. Increased dust, sedimentation, and pollution may temporarily degrade vireo habitat. To minimize the potential for sedimentation and water quality impacts, a SWPPP would be implemented, including use of appropriate BMPs to control dust, erosion, sedimentation, and pollution. With implementation of these measures, the effects of construction dust, pollution, and sedimentation on vireos would be minimized.

The project may increase wildfire risk and effects from human encroachment from increased access. The project site is adjacent to existing development in a highly populated area, so with the proposed conservation measures, any increase in habitat degradation associated with these factors is expected to be less than significant.

On October 13, 2022 the Carlsbad Fish and Wildlife Office (CFWO), a functional unit under the U.S. Fish and Wildlife Service, concurred that the project's effect determination for least Bell's vireo is May Effect, Not Likely to Adversely Affect. There is occupied habitat present adjacent to the project area, within 500 feet of the Otay River Bridge. Noise disturbance and temporary loss of habitat are anticipated; however, impacts are expected to be minimal, relative to the available habitat. In addition, no net loss of habitat would occur as result of onsite habitat restoration. Although indirect effects including stressors from project construction may occur within suitable habitats, the implementation of avoidance and minimization measures and beneficial design features, described below, would avoid and minimize impacts to suitable habitat for this species. Due to the limited acreage of vireo habitat impacted in comparison to the available habitat and the distribution of these impacts along an existing highway in an urban area, the proposed action is not expected to appreciably reduce the numbers, reproduction, or distribution of the least Bell's vireo population in this region of San Diego County.

California Gnatcatcher

There is occupied California Gnatcatcher habitat present adjacent to the project area at the westbound H Street onramp to northbound I-805 and along the bike path at the westbound Palm Drive onramp to northbound I-805. Temporary impacts would occur within 500 feet of gnatcatcher detections. Under Variation 1, the proposed project would result in 0.44 acre of temporary impacts to riparian habitat and no permanent impacts, while Variation 2, the pier bridge, would result in 1.14 acres of temporary impacts to riparian habitat

and 0.0009 acre of permanent impacts from bridge piers in the Otay River valley. Noise disturbance and temporary loss of habitat are anticipated; however, impacts are expected to be minimal. In addition, no net loss of habitat would occur as result of onsite habitat restoration. Although indirect effects including stressors from project construction may occur within suitable habitats, the implementation of avoidance and minimization measures and beneficial design features would avoid and minimize impacts to suitable habitat for this species. As stated in the Biological Opinion sent October 13, 2022 by CFWO, the proposed project is not likely to adversely affect the federally threatened coastal California gnatcatcher. Due to the limited acreage of gnatcatcher habitat impacted and the distribution of these impacts along an existing highway in an urban area, the proposed action is not expected to appreciably reduce the numbers, reproduction, or distribution of the gnatcatcher population in this region of San Diego County.

No-Build Alternative

The No-Build Alternative would not involve construction along the project limits, the current structure and facilities would not improve, no bike bridge would be constructed, and no impacts would occur.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans has agreed to implement the following conservation measures (CM) as part of the proposed action to avoid and minimize impacts to vireos:

- As stated in the Biological Opinion, Caltrans would offset permanent impacts to vireo habitat of up to 0.0009 acre through the conservation of 0.0027 acre of riparian forest habitat suitable for vireos at the Rancho San Diego mitigation bank, or another off-site location or mitigation bank as reviewed and approved by the CFWO, the Carlsbad office of the USFWS. Documentation that the habitat has been conserved would be provided to the CFWO prior to the commencement of vegetation removal and project construction.

- The project would restore/enhance between 0.44 acre (if Variation 1 is selected) and 1.14 acres (if Variation 2 is selected) of native riparian habitat suitable for vireo on, or adjacent to, the action area.

- Caltrans would offset temporary impacts to vireo habitat of up to 1.14 acres through the restoration/enhancement of the temporary impact areas. Caltrans would submit a habitat restoration plan to the CFWO for review and approval at least 30 days prior to initiating project impacts. The plan would include the following information and conditions:

    - All habitat restoration sites would be prepared for planting in a way that mimics natural habitat to the maximum extent practicable. All plantings would be installed in a way that mimics natural plant distribution and not in rows.

- Planting palettes (plant species, size, and number/acre) and seed mixes (plant species and pounds/acre) would be limited to locally native species (e.g., species found in or near the biological study area for the project). The source location of all plant material and seed would be provided to the CFWO prior to use in restoration activities.

- Container plant survival would be 80 percent of the initial plantings for the first 3 years. At the first and second anniversary of plant installation, all dead plants would be replaced unless their function has been replaced by plants from seed or natural recruitment.

- A final implementation schedule would indicate when all impacts, as well as restoration planting and irrigation would begin and end.

- The final restoration plan would include 3 years of success criteria for restoration areas including: percent cover, evidence of natural recruitment of multiple species for all habitat types, 0 percent coverage for all woody California Invasive Plant Council's (Cal-IPC's) "Invasive Plant Inventory" species (e.g., trees and shrubs), and no more than 10 percent coverage for other exotic/weed species.

- A minimum of 3 years of maintenance and monitoring of restoration areas, unless success criteria are met earlier and all artificial water supplies have been off for at least 2 years.

- A qualitative and quantitative vegetation monitoring plan with a map of proposed sampling locations. Photo points would be used for qualitative monitoring and stratified-random sampling would be used for all quantitative monitoring.

- Contingency measures to be implemented in the event of restoration failure.

- Annual mitigation maintenance and monitoring reports would be submitted to the CFWO no later than December 1 of each year.

- If maintenance of a riparian restoration area is necessary between March 15 and August 31, a qualified biologist would survey for vireos within the restoration area, access paths to it, and other areas susceptible to disturbances by restoration site maintenance. Surveys would consist of three visits separated by 2 weeks starting April 10th of each maintenance/monitoring year. Restoration work would be allowed to continue on the site during the survey period. However, if vireos are found during

any of the visits, the Caltrans project biologist would notify and coordinate with the CFWO to identify measures to avoid and/or minimize effects to the vireo (e.g., nests and an appropriate buffer would be flagged by the biologist and avoided by the maintenance work).

- Construction activities would be limited to the impact boundaries by installing highly visible fencing (i.e., silt fence with flagging, orange snow fencing, or other suitable non-penetrable fencing) or staking and flagging along the boundary to prevent construction from encroaching into sensitive habitats. Installation of staking and flagging, Environmentally Sensitive Areas (ESAs), fencing and silt fencing, and implementation of BMPs would take place prior to the start of construction. Construction access and staging would be restricted to the disturbance limits for the proposed action. Specific staging and storing sites would be determined closer to construction, but all construction staging and storing, fuel sites, and concrete mixing sites, etc., would occur in previously disturbed areas outside of ESAs. All grading would occur within the disturbance limits of the project. Disposal of excavated material (soil, rock, vegetation, and solid waste) is the responsibility of the contractor and would occur off-site in a permitted off-site treatment and/or disposal facility.

- To minimize construction noise impacts to nesting vireos, project construction adjacent to their use area has been scheduled between August and December of 2024. If the construction schedule shifts such that construction may occur during the nesting season, and vireo nests are documented within 500 feet of project construction, a noise abatement plan would be prepared and implemented consistent with the project's Biological Opinion and in coordination with USFWS and CDFW.

- A biologist approved by the CFWO would be on site: (a) during all vegetation clearing, and (b) weekly during project construction within 500 feet of vireo habitat to monitor compliance with all conservation measures. Caltrans would submit the biologist's name, contact information, and work schedule on the project to the CFWO at least 15 working days prior to initiating project impacts. The project biologist would be provided with a copy of this consultation. The project biologist would be available during pre-construction and construction phases to address protection of sensitive biological resources, monitor ongoing work, and maintain communications with construction personnel to facilitate the appropriate and lawful management of issues relating to biological resources.

- The project biologist would submit monthly email reports (including photographs of impact areas) to the CFWO during clearing of, and construction within, 500 feet of vireo habitat. The monthly reports would document that authorized impacts were not exceeded and general compliance with all conditions. The reports would also outline the location

of construction activities, the type of construction that occurred, and equipment used. These reports would specify numbers and locations of listed species, their observed behavior (especially in relation to construction activities), and remedial measures employed to avoid and minimize impacts to these species. Raw field notes should be available upon request by the CFWO.

- The project biologist would submit a final report to the CFWO within 120 days of project completion including photographs of impact areas and adjacent habitat, documentation that authorized impacts were not exceeded, and documentation that general compliance with all conservation measures was achieved. The report would specify numbers and locations of listed species (if observed); observed listed species behavior (especially in relation to project activities); and remedial measures employed to avoid and minimize impacts to listed species and critical habitat. Raw field notes should be available upon request by the CFWO.

- The clearing and grubbing of native riparian habitats for the project would be conducted between September 1 and March 14 to avoid the vireo breeding season (or sooner than September 1 if the project biologist demonstrates to the satisfaction of the CFWO that all nesting is complete).

- The clearing and grubbing of native upland habitats for the project would be conducted between September 1 and February 15 to avoid the California gnatcatcher breeding season (or sooner than September 1 if the project biologist demonstrates to the satisfaction of the CFW that all nesting is complete).

- All native or sensitive habitats outside and adjacent to the construction limits would be designated as ESAs on project maps. ESAs would be temporarily fenced during construction with orange plastic snow fence, orange silt fencing, or in areas of flowing water, with stakes and flagging. No personnel, equipment, or debris would be allowed within the ESAs. Temporary ESA fencing and flagging would be installed in a manner that does not impact habitats to be avoided and such that it is clearly visible to personnel on foot and operating heavy equipment. Caltrans would submit to the CFWO, at least 5 days prior to initiating project impacts (except for impacts resulting from clearing to install temporary fencing), the final plans for initial clearing and grubbing of habitat and project construction. These final plans would include photographs that show the maps indicating the location of temporary ESA fencing and/or staking would also be provided. If work occurs within vireo habitat beyond the fenced or demarcated limits of impact, all work will cease until the problem has been remedied to the satisfaction of the CFWO and CDFW. Temporary ESA fencing and markers would be maintained in good repair until the completion of project work and removed upon completion of project work.

- An employee education program would be developed and implemented by the project biologist. Each employee (including temporary, contractors, and subcontractors) would receive a training/awareness program prior to working on the proposed project. They would be advised of the potential impact to the listed species and the potential penalties for taking such species. At a minimum, the program would include the following topics: occurrence of the listed and sensitive species in the area (including photographs), their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of Federal and State laws, reporting requirements, and project features designed to reduce the impacts to these species and promote continued successful occupation of the project area.

- During project construction all invasive species included on the National Invasive Species Management Plan, the State of California Noxious Weed List, and the California Invasive Plant Council's Invasive Plant Inventory list (Cal-IPC 2006) found growing within the project impact area would be identified and removed at least once a month. Special care would be taken during transport, use, and disposal of soils containing invasive weed seeds and all weedy vegetation removed during construction would be properly disposed of to prevent spread into areas outside of the construction area. All heavy equipment would be washed and cleaned of debris prior to entering a new area to minimize the spread of invasive weeds.

- No invasive species listed in the National Invasive Species Management Plan, State of California Noxious Weed List, or Cal-IPC Invasive Plant Inventory list (Cal-IPC 2006) would be used in the landscaping plans for the project. Landscaping plans for the project would be submitted to the CFWO for review and approval at least 15 days prior to commencing vegetation clearing and construction work.

- If nighttime construction is necessary, all project lighting (e.g., staging areas, equipment storage sites, roadway) would be of the lowest illumination necessary for human safety, selectively placed, and directed onto the construction site and away from sensitive habitats. Light glare shields would be used to reduce the extent of illumination into sensitive habitats.

- Permanent project lighting would be of the lowest illumination necessary for safety and would be directed toward the bridge and paved roadway and away from sensitive habitats. Light glare shields would be used to reduce the extent of illumination into sensitive habitats. Caltrans would review the permanent lighting plans for the project and then submit them to the CFWO. CM 13.

- A SWPPP and soil erosion and sedimentation plan would be developed to identify BMPs that would be implemented during construction to minimize

erosion, prevent sediment and debris from entering drainages, and maintain water quality. Sediment would not be stockpiled in areas where material could be washed into drainages by rainfall. Erosion and sediment control devices used for the proposed project, including fiber rolls and bonded fiber matrix, would be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.

- Measures would be incorporated to decrease wildfire risk, such as an employee education program and availability of firefighting equipment, to avoid and minimize these impacts to vireos.

- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities would be restricted to designated areas located within previously disturbed upland. They would be located such that runoff from the designated areas would not enter vireo habitat.

- Impacts from fugitive dust would be minimized through watering and other appropriate measures.

- The project site would be kept as clear of debris as possible. All food-related trash items would be enclosed in sealed containers and regularly removed from the site.

- Project personnel would be prohibited from bringing domestic pets to construction sites to ensure that domestic pets do not disturb or depredate wildlife in adjacent native habitats.

- Fire suppression equipment, including extinguishers and shovels, would be available on site during construction.

- If project construction, excluding clearing and grubbing, is necessary during the vireo breeding season (March 15–August 31) that would generate noise in excess of 60 dBA hourly Leq, or ambient noise levels, whichever is greater, within vireo nesting habitat, measures would be implemented to reduce noise disturbance to vireos. A noise abatement plan would be submitted to the CFWO for review and approval 30 days prior to commencing project work. The noise abatement plan would include the following information: (a) a description of the noise abatement measures that would be implemented by the project (e.g., mufflers, use of a vibratory driver, shroud for pile driver, soft start, cushion block, sound wall or curtain, placement of project generators away from the riparian area and behind k-rail, etc.) and (b) noise levels that are anticipated within the adjacent vireo nesting habitat. The project biologist would oversee implementation of the noise abatement plan and may conduct noise monitoring and vireo surveys as needed, based on their judgment and knowledge of the species, site, and proposed activities, to minimize noise impacts to vireos.

- The bridge would be long enough to accommodate dry wildlife movement areas on both banks of the Otay River to ensure that ecosystem functions are maintained for the benefit of listed species. Rock slope protection would be avoided at the wildlife movement areas. If rock slope protection is required, modifications (e.g., small pebble, dirt, soil covered rip rap, or grouted movement pathways) would be made such that animals of all sizes can use the wildlife movement areas.

- To the extent possible, vegetation clearing in and adjacent to coastal sage scrub would occur outside of the breeding season for gnatcatcher (February 15 through August 31). If work is proposed to start during the gnatcatcher or other avian species breeding season, a pre-activity nesting bird survey would be conducted within 7 days prior to starting work to identify any nesting gnatcatchers or other birds within 300 feet of the project area. If work stops for more than 7 days during the breeding season, the pre-activity survey would be repeated before restarting work. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within this area, vegetation trimming and other project activities would be allowed to proceed. If nesting birds are found, the qualified biologist would flag the active nests and project activities would avoid active nests until nesting behavior has ceased, nests have failed, or young have fledged and/or the biologist, in consultation with USFWS and CDFW, determines that no impacts are anticipated to the nesting birds or their young. Project activities within 300 feet of a nest that could generate noise greater than ambient noise levels, at the edge of occupied habitat, would either be postponed until a qualified biologist, in consultation with USFWS, determines the nest(s) is no longer active or until after the respective breeding season; or not occur until a temporary noise barrier or berm is constructed at the edge of the development footprint and/or around the piece of equipment to ensure that noise levels are reduced to ambient levels. Buffer distances may be adjusted as recommended by the qualified biologist depending on the sensitivity of the species.

2.1.5 Cultural Resources

Considering the information in the Paleontological Resource Assessment memorandum dated April 7, 2021 and Historic Property Survey Report (HPSR) dated August 9, 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	**Less Than Significant Impact**
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	**No Impact**

Regulatory Setting

CEQA requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. 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). 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 eligibility criteria for the NHRP) It further requires Caltrans 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 Office (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed in or are eligible for inclusion in the NRHP or are registered or eligible for registration as California Historical Landmarks (CHLs). Procedures for compliance with PRC Section 5024 are outlined in a Memorandum of Understanding (MOU) between Caltrans and the SHPO, effective January 1, 2015. [The MOU is located on the Standard Environmental Reference at https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/5024mou-15-a11y.pdf.] For most federal-aid projects on the State Highway System, compliance with the Section 106 Programmatic Agreement (PA) would satisfy the requirements of PRC Section 5024. The Section 106 PA is allowed by 36 CFR part 800.14 to be used as an alternative way to comply with Section 106. Formally, an agency official may develop procedures to implement Section 106 and substitute them for all or part of the Section 106 requirements if they are consistent with the Council's regulations pursuant to Section 110(a)(2)(e) of the act. Compliance with the Section 106 PA also meets the responsibilities for reporting under 5024.

Affected Environment

Caltrans prepared a Paleontological Resource Assessment memorandum dated April 7, 2021 and HPSR dated August 9, 2021 for the proposed project. These studies delineated an Area of Potential Effect (APE) to identify historic properties that may be affected by the proposed project. Due to the nature of

the proposed project, no excavation into intact sediments would occur and no impacts to archaeological resources are anticipated. Cultural resources studies focused on the potential impacts on historical resources in the built environment.

The APE, as defined in 36 CFR Part 800.16(d), is “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.” The APE encompasses all Caltrans right-of-way from PM 0.1 to 14.6 where construction activities, including staging areas, will take place. Also included in the archaeological APE is site CA-SDI-761.

Environmental Consequences

Proposed Project

The proposed project would occur within existing developed Caltrans facilities. Three (3) archaeological resources were previously recorded within and/or adjacent to the project area limit. Archaeological sites (CA-SDI- 13002, and 13003) were tested, delineated, and included in a previously written HPSR for the Interstate 805 Managed Lanes South Project. The results of said study states that the portions of CA-SDI-13002 and 13003 within Caltrans ROW were determined to be ineligible for the NRHP or the CRHR. SHPO concurrence for sites CA-SDI-13002 and 13003 being ineligible, was received on November 25th, 2009.

In addition, Site CA-SDI-761 is recorded as a lithic scatter in the Otay River Valley north and west of the APE and is bisected by I-805. The location of the site has undergone extensive disturbances due to the construction of Interstate 805 and associated concrete drainages. SDI-761 is considered eligible for inclusion in the NRHP for the purposes of this project, and it would be protected in their entirety from any potential effects through the establishment of an Environmentally Sensitive Area (ESA) to prevent any inadvertent impacts during construction.

No-Build Alternative

The No-Build Alternative would not involve construction along the proposed project limits, and no sensitive sites would be impacted.

Avoidance, Minimization, and/or Mitigation Measures

To ensure potential effects to cultural resources are minimized, Caltrans would implement an ESA around the site boundary and immediate surrounding area, in accordance with Section 106 PA Stipulation VIII.C.3. No project related activities would take place with the ESA, Excavation required as part of project activities would be minor and located within the existing disturbed sites, and is not anticipated to disturb undocumented subsurface cultural resources. Therefore, no impacts are anticipated to occur.

2.1.6 Energy

Question—Would the project:	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**
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	**No Impact**

Discussion of Environmental Evaluation Questions

The proposed project would occur within existing and developed Caltrans facilities. Project activities would be short term and temporary and do not include permanent components during operations that would significantly increase demand or increase use of existing sources of energy. Lighting installed for the bike bridge would rely on low path lights, wall washing lights, and accent up lights to provide a low-level ambient effect. Pole lights would be a pedestrian-friendly ten or twelve feet in height and fixtures would be LED, shielded, and maximum 3000 Kelvin. Therefore, no impacts would occur to energy.

2.1.7 Geology and Soils

Question—Would the project:	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**
ii) Strong seismic ground shaking?	**No Impact**
iii) Seismic-related ground failure, including liquefaction?	**No Impact**
iv) Landslides?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
b) Result in substantial soil erosion or the loss of topsoil?	**No Impact**
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	**No Impact**
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	**No Impact**
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**
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**No Impact**

Discussion of Environmental Evaluation Questions

The proposed project would occur within existing and developed Caltrans facilities. Project construction activities would be short term and temporary and after implementation there would be no change from current geological conditions. Therefore, no impacts would occur to geological and soil resources or seismic conditions.

2.1.8 Greenhouse Gas Emissions

Considering the information in the Climate Change Technical Study dated January 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Greenhouse Gas Emissions
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	**Less Than Significant Impact**
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	**No Impact**

Regulatory Setting

California has been innovative and proactive in addressing greenhouse gas emissions (GHGs) and climate change by passing multiple Senate Bills (SBs), Assembly Bills (ABs), 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 AB 32 in 2006 and SB 32 in 2016.

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 ARB create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Although AB 32 established a statewide GHG emissions limit to be achieved by 2020, 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 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 readopted 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.

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 for each region must then develop a "Sustainable Communities Strategy" that integrates transportation, land-use, and housing policies to plan how it would achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires California'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 (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" (CO2e). 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."

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

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 travelled, to promote the state's goals of reducing GHG 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 GHG 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.

Affected Environment

The 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 found total California emissions of 418.2 MMTCO2e for 2019, with the transportation sector responsible for 40 percent of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2019 despite growth in population and state economic output (ARB 2021).

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System and those produced during construction. The primary GHGs produced by the transportation sector are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and hydrofluorocarbons (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 N2O are emitted during fuel combustion. In addition, a small amount of HFC emissions is included in the transportation sector.

The CEQA Guidelines generally address GHG emissions as a cumulative impact due to the global nature of climate change (PRC Section 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).

The proposed project is located in an urban setting in San Diego County within the cities of San Diego, Chula Vista, and National City on I-805 from PM 0.1 (0.3 mile south of I-805/I-5 Separation) to PM 14.6 (I-805/I-15 Separation). The project area is surrounded by well-developed road and street networks that serve residential and commercial uses. The route is a

heavily used north-south connector, especially during peak hours. A Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) by the San Diego Association of Governments (SANDAG) guides transportation and land use development in the proposed project area to target GHG reductions.

Pavement Rehabilitation is the anchor asset, which consists of pavement grinding, full lane replacement, ISR, ramp rehabilitation, and shoulder rehabilitation. The project would add 3 auxiliary lanes, upgrade TMS, and enhance pedestrian and cyclist connectivity with the construction of a bike bridge and installing Class II, III, and IV bike lanes.

Environmental Consequences

Proposed Project

Construction Emissions

The proposed project would result in GHG emissions during construction due to material processing and transportation, construction equipment, and traffic delays. These emissions would 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. Temporary construction would be mitigated with best management practices and specifications.

GHG emissions associated with construction activities were estimated using the Caltrans Construction Emissions Tool (CAL-CET). Table 2.1.8-2 shows the anticipated construction-related GHG emissions for the proposed project. Construction of the proposed project would generate approximately 11,652 tons of carbon dioxide equivalent (CO2e), after accounting for the Global Warming Potential (GWP) of each GHG.

Table 2.1.8-1: Total Construction-Related GHG Emissions

GHG	Total Emissions (tons/year)
CO2	7,456
N2O	120.09
CH4	5.725
BC	0.390
HFC	4,070
Total CO2e	**11,652**

Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; N_2O = nitrous oxide; CH_4 = methane; BC = black carbon; HFC = hydrofluorocarbons.
Global warming potential (GWP) values are assumed N_2O is 298, CH4 is 25, BC is 898, HFC is 14,800.
Source: Caltrans 2021a

Operational Emissions

The project proposes to reduce GHG emissions by improving traffic operations, operational efficiencies and enhancing multimodal options. The project would add three auxiliary lanes, upgrade TMS, and enhance pedestrian and cyclist connectivity.

ARB developed the EMission FACtors (EMFAC) model to facilitate preparation of statewide and regional mobile source emissions inventories. The model generates emissions rates that can be multiplied by vehicle activity data from all motor vehicles, including passenger cars to heavy-duty trucks, operating on highways, freeways, and local roads in California. EMFAC has a rigorous scientific foundation, has been approved by U.S. EPA, and has been vetted through multiple stakeholder reviews. Caltrans developed CT-EMFAC to apply project-specific factors to ARB's model.

Operational GHG emissions for the proposed project were modeled using CT-EMFAC. As shown in Table 2.1.8-2 below, the operational emissions are moving in a downward trend that indicates improved operations in coming years. Comparing the alternatives, the data demonstrates that the proposed project would generate slightly higher GHG emissions than the No-Build Alternative. Carbon dioxide (CO2) levels would increase by 0.33 tons per year in 2030 (0.01% increase) and 0.04 tons per year in 2050 (0.00176% increase) if the project is built versus the No-Build Alternative. Considering that the proposed project would increase the efficiency of the corridor, this is an insignificant increase in CO2.

The addition of the auxiliary lanes would decrease other modeled GHG emissions. The difference in emission values is lowered among nitrous oxide (N2O), methane (CH4), black carbon (BC), and hydrofluorocarbons (HFC). The data shows slightly higher values for nitrous oxide (0.00007 tons/year delta or 0.00517% increase) and black carbon (0.000000099 tons/year delta or 0.000239% increase) for the Build Alternative than for the No-Build Alternative in 2030, but lower values for both nitrous oxide and black carbon for the Build Alterative by 2050. Alternately, the data shows that emissions for methane are slightly lower for the build alternative than the No-Build Alternative at 2030 (0.000035 tons/year delta or 0.024% decrease), but slightly higher for the Build Alternative at 2050 (0.000006 tons/year delta or 0.00537% increase). Hydrofluorocarbons would be consistently lower for the Build alternative than the No-Build Alternative in 2030 and 2050.

Table 2.1.8-2: Modeled Annual Operational GHG Emissions (tons/year)

GHG	Existing 2020	No Build 2030	Open To Traffic 2030	No Build 2050	20-Year Horizon 2050
CO_2	31.94	31.41	31.74	22.72	22.76
N_2O	0.00159	0.001354	0.001361	0.0009914	0.0009856
CH_4	0.001704	0.001451	0.001416	0.001118	0.001124
BC	0.00009156	0.00004187	0.00004286	0.00002312	0.000023
HFC	0.00005886	0.00001938	0.0000184	0.000000564	0.0000005616

Source: CT EMFAC (2022)
CO_2 = carbon dioxide, N_2O = Nitrous Oxide, CH_4 = Methane, BC= Black Carbon, HFC= Hydrofluorocarbon

For operational GHG emissions, it is anticipated that the addition of auxiliary lanes, TMS, and enhanced pedestrian and bicycle facilities would allow for greater efficiency in the movement across the I-805 which would result in a reduction of GHG emissions. There would be a less than significant increase in CO_2. However, the proposed project would increase operational efficiency, improve traffic operations, and increase multi-modal opportunities. Future GHG emissions would be reduced according to the model projections due to external factors. Nitrous oxide, black carbon and hydrofluorocarbons, would be reduced due the construction of the proposed project. 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.

No-Build Alternative

The No-Build Alternative would not involve construction along the project limits. The current structure and facilities would not improve, no bike bridge would be added, and no impacts would occur.

Avoidance, Minimization, and/or Mitigation Measures

All construction contracts include Caltrans Standard Specifications to reduce temporary GHG emissions. 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 temporary GHG emissions. It is expected that temporary road, lane, and ramp closures would be required to maintain public safety. A Traffic Management Plan would be implemented to minimize effects to traffic.

The following measures would also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

- Add auxiliary lanes to increase operational efficiency.
- Implement intelligent transportation systems and TSM elements to smooth traffic flow and increase system efficiency.
- Upgrade lighting to efficient LED fixtures.

The construction contractor would also implement the following measures during construction:

- The construction contractor shall utilize alternative fuels such as renewable diesel for construction equipment when feasible.
- The construction contractor shall implement an idling limit of 5 minutes for delivery trucks and other diesel-powered equipment (with some exceptions).
- The construction contractor shall schedule truck trips outside of peak morning and evening commute hours and implement a Traffic Management Plan to minimize effects to traffic.
- The construction contractor shall reduce construction waste.
- The construction contractor shall maximize improved fuel efficiency of construction equipment through ensuring that construction equipment is maintained and properly tuned, and equipment has been right sized for the job.
- The construction contractor shall provide construction personnel with the knowledge to identify environmental issues and best practice methods to minimize impacts to the human and natural environment. Supplement existing training with information regarding methods to reduce GHG emissions related to construction.

2.1.9 Hazards and Hazardous Materials

Considering the information in the Hazardous Waste Initial Site Assessment Review memorandum dated February 9, 2022, the following significance determinations have been made:

Question—Would the project:	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?	**Less Than Significant Impact**
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**
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	**Less Than Significant Impact**
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?	**Less Than Significant Impact**
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?	**Less Than Significant Impact**
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	**Less Than Significant Impact**
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	**Less Than Significant Impact**

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state 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.

California regulates hazardous materials, waste, and substances under the authority of the California Health and Safety Code and is also authorized by the federal government to implement the Resource Conservation and Recovery Act 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 are vital if it is found, disturbed, or generated during project construction.

Affected Environment

The GeoTracker (State Water Resources Control Board, SWRCB) database was reviewed for nearby hazardous waste/unauthorized release facilities that may have impacted the environmental condition of the project area. Sixteen (16) facilities (potential recognized environmental conditions (RECs)) were identified during the database review.

An evaluation of potential contaminants of concern was conducted based on available information to determine the potential presence of hazardous materials on the existing highway infrastructure. As stated in the technical memorandum, it is assumed that that substances regulated by California under Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, such as aerially deposited lead (ADL), asbestos, and hazardous chemical preservatives are likely present in the pavement slabs, bridge structures, soil, striping, and wooden guardrail and signposts.

Environmental Consequences

Proposed Project

Construction activities would primarily be focused within the Caltrans right-of-way on the existing interstate structure, consisting mostly of concrete and other hardscape materials. However, if soil disturbance is determined necessary during advanced design phases, a soil investigation for potential Title 22 contaminants would be conducted. If investigations showed evidence of contaminants, a designated NSSP *14-11.11 Department-Generated Contaminated Soil* would be required to identify and ensure proper handling of the contaminated soils to avoid exposure risks.

Disposal of hazardous materials which may be determined present during construction would require special handling, reuse, and disposal because of their potential to harm human health and the environment. To avoid adverse environmental effects related to the accidental release of these toxins into the environment during construction, a “Debris Containment and Collection Plan” would be required for proper containment during disturbance activities. A lead compliance plan would also need to be prepared and implemented during construction activities, if lead is found to be present in the existing structures. The lead compliance plan would comply with Caltrans’ Standard Specification 7-1.02K(6)(j)(ii) (Caltrans 2018).

A survey would be conducted to ensure no asbestos hazard exists in the soil or from the bridge material. A detailed site investigation will be conducted during final design phase to determine where ADL contaminated soil is present within the project limits. If Asbestos Containing Material (ACM) is found, implementation of SSP *14-11.16 Asbestos Containing Construction Material in Bridges* would be implemented to ensure proper asbestos safety measures and handling of materials to avoid exposure risk.

Typical hazardous materials used during construction (e.g., solvents, paints, and fuels) would be managed in accordance with Caltrans standardized measures and other regulatory requirements and is not anticipated to compromise workers’ health and safety. Applicable state and federal regulations, permit conditions, and Caltrans standard and nonstandard special provisions for the use, handling, disposal, waste, storage, and transport of potentially hazardous materials during construction of the proposed project would minimize potential for accidental exposure of people or the environment to hazardous materials.

The proposed project could result in a hazard to public or environment through transport, use, and/or disposal of hazardous materials. Release of hazardous materials may occur during equipment maintenance involving fuel, lubricating oil, hydraulic fluid, and other construction-related chemicals from vehicles and equipment.

Per standard Caltrans construction protocols, staging areas for construction equipment and materials would be within specifically designated areas within the Caltrans right-of-way and/or ownership and a spill prevention plan would be implemented to reduce risk of accidental spills during construction activities. Applicable regulatory requirements regarding hazardous material handling, transport, storage, and disposal would be implemented and would minimize the risk of accidental release or exposure.

With the implementation of the standardized measures above, the proposed project would have a less than significant impact on the public or the environment through handling and potential release of hazardous materials into the environment.

While there are schools located within one-quarter mile of the proposed project area, construction activities would be located within the Caltrans right-of-way associated with the interstate and would not extend to areas adjacent to the school properties. Hazardous materials that may be encountered during construction activities would be contained and confined to the construction area and would not influence schools or attending students near the proposed project area. Caltrans provisions related to hazardous materials identified above, along with applicable state and federal regulatory requirements specific to hazardous materials, would be incorporated to ensure hazardous materials would be properly contained during construction activities. Therefore, potential impacts from emitting or handling hazardous materials within one-quarter mile of existing schools would be less than significant.

The proposed project is not within the vicinity of private or public airstrips or an airport land use plan; therefore, no impacts from safety hazards or excessive noise to people in the area from implementation of the proposed project would occur.

Additionally, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project would not hinder emergency response during construction or normal operations and maintenance, as these activities would occur within existing developed Caltrans facilities, and access would include minimal truck trips via existing roadways.

Because the proposed project would be required to comply with existing regulations including sampling, spill control, and prevention of release of hazardous materials to the environment, there would be a less than significant impact.

No-Build Alternative

The No-Build Alternative would not involve construction along the project limits. The current structure and facilities would not improve, no bike bridge would be added, and no impacts would occur.

Avoidance, Minimization, and/or Mitigation Measures

As described above, to ensure potential effects involving hazardous materials/ waste during construction are avoided or reduced, the following avoidance, minimization, and/or mitigation measures would be implemented:

- A Debris Containment and Collection Plan under SSP *14-11.13B(2)* would be required.
- A lead compliance plan would be required during construction requiring paint disturbance.

- An asbestos-containing materials survey would be conducted to determine if the existing structure contains asbestos. If it is determined asbestos is present, further action would be required per Caltrans standard construction practices.

By adhering to state and federal regulatory requirements and Caltrans provisions related to the avoidance and minimization of hazardous material risk and exposure, the proposed project would not expose workers, the public, or the environment to hazardous waste or materials during construction or operation.

2.1.10 Hydrology and Water Quality

Considering the information in the Draft Location Hydraulics Study dated December 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality?	**No Impact**
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**
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 onsite or offsite;	**No Impact**
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	**No Impact**
(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	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
(iv) impede or redirect flood flows?	**Less Than Significant Impact**
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	**No Impact**
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	**No Impact**

Regulatory Setting

The Otay River is Federal Emergency Management Agency (FEMA) regulated Floodplain and Floodway. Per the Code of Federal Regulation (CFR), Title 23, Part 650, Subpart A, Caltrans is required to be compatible with the National Flood Insurance Program (NFIP) of the Federal Emergency Management Agency (FEMA). Where NFIP maps and reports are available, their use is mandatory in determining whether proposed highway improvements encroach on a Floodplain or Floodway. Projects which involve proposed construction within a Floodplain or Floodway need to be analyzed to determine whether it may be necessary to obtain a map revision.

The responsibility for enforcing NFIP regulations rests with the Local Agency or Community. It is the Local Agency's responsibility to establish and regulate Floodplains and Floodways. Participating Communities agree to regulate new development in the designated Floodplain and Floodway through regulations adopted in a Floodplain ordinance. The ordinance requires that development in the designated Floodplain and Floodway are consistent with the intent, standards and criteria set by the NFIP; however, any community may exceed the minimum criteria set forth under the NFIP, thus any Floodplain management regulations adopted by a Community which are more restrictive than the criteria set forth by the NFIP shall take precedence. Therefore, coordination and approval of proposed actions within Floodplains and Floodways from the regulating Local Agency is required.

Affected Environment

The proposed project would occur primarily within existing developed Caltrans facilities, with a new bicycle bridge to be constructed on the east side I-805 over the Otay River.

There are two Local Agencies that have jurisdiction over the Otay River Floodplain/Floodway at the I-805 crossing, the City of San Diego and the City of Chula Vista. Coordination with the City of San Diego and City of Chula

Vista Floodplain Managers was initiated to determine if Floodplain studies were required and the requirements for those Floodplain studies.

Floodplain Encroachment

Encroachment is defined as a highway action within the limits of a base (100-year) Floodplain. A transverse encroachment is an encroachment that crosses a Floodplain. A longitudinal encroachment is an encroachment that roughly parallels a Floodplain. It is policy to avoid longitudinal encroachments or significant encroachments where practicable.

Floodway Encroachment

A Floodway is the Floodplain area that is reserved in an open manner by Federal, State or Local requirements to provide for the discharge of the base flood, so that the cumulative increase in water surface elevation is no more than a designated amount. Floodways are the most restrictive of all the flood hazard areas as these areas have been specifically set aside as an area that is to remain encroachment-free. If a project element encroaches on the Floodway but has no effect on the Floodway water surface elevation, then the project is considered to be in compliance with NFIP standards.

Environmental Consequences

The proposed project would construct a bike trail along the east side of I-805 between Palm Avenue and Main Street, which would run parallel to I-805 and require a new bridge to cross the Otay River. There are two variations for this proposed bike trail bridge, a Hanging Bicycle Bridge (Variation 1) and a Multi-Span Bicycle Bridge (Variation 2).

Variation 1: Hanging Bicycle Bridge

Variation 1 would hang from the existing I-805 northbound bridge and be approximately 30-feet above the riverbed. The proposed bridge would be 347-feet long and 14-feet wide and connected via suspender cable underneath the existing Otay River Bridge. The underside of the proposed hanging bicycle bridge superstructure would vary in elevation from approximately 106.8-feet at the southern end of the proposed bridge to 104.4-feet at the northern end of proposed bridge. The 100-year water surface elevation under the Otay Bridge varies from 84-feet on the downstream end of the existing Otay Bridge to 86-feet at the upstream end of the existing Otay Bridge. Comparing the lowest point on the underside of the proposed bridge superstructure to the upstream Otay River water surface elevation, the proposed elevation is a minimum of 18-feet above the 100-year water surface elevation.

As Variation 1 does not propose any features within the FEMA regulated Floodplain/Floodway, does not require any grading within the floodplain/floodway limits, and is a minimum of 18-feet above the 100-year water surface elevation, Variation 1 would not impact the FEMA regulated Floodplain/Floodway.

Variation 2: Multi-Span Bicycle Bridge

Variation 2 would be 410-feet long and 14-feet wide and run parallel, approximately 19-feet east, to the existing Otay River Bridge. The multi-span bridge would include the addition of three piers to be placed in the Otay River Floodplain/Floodway.

As Variations 2 includes features within the FEMA regulated Floodplain/Floodway, a Location Hydraulics Study (LHS) was performed to determine any impacts to the FEMA regulated Floodplain/Floodway. Based on the LHS, it was determined that the proposed piers to be constructed within the FEMA regulated Floodway would cause a maximum water surface elevation rise of 0.05-feet (0.6 inch). FEMA regulations require that any more than 0.00 foot rise in water surface elevation constitutes a change to the mapped floodway and base flood elevations, and would trigger a Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR).

Although Variation 2 impacts the FEMA regulated Floodplain and Floodway and triggers a CLOMR and LOMR through FEMA, there would be no significant risks associated with the implementation of the multi-span bicycle bridge. A water surface elevation rise of 0.05-feet (0.6 inches) is considered Less Than Significant.

Due to the minimal change in water surface elevation, it is anticipated that NFIP mapping would remain unchanged, as well as the FIS study. Therefore, Variation 2 would have a less than significant impact on the FEMA regulated Floodplain and Floodway.

Construction activities would be short term with minimal soil disturbance and grading. The proposed project would be designed in conformance with National Pollutant Discharge Elimination System (NPDES) Permit Order 2012-0011-DWQ and Appendix E of the Caltrans Project Planning and Design Guide. A Water Pollution Control Program would be prepared and BMPs implemented as necessary to prevent discharges from construction activities.

Avoidance, Minimization, and/or Mitigation Measures

Variation 1 would not result in any changes to the Floodplain and Floodway, and Variation 2 would have a less than significant impact. The proposed project would not violate any water quality standards or waste discharge requirements, withdraw a large amount of groundwater or entail features or activities that would obstruct groundwater infiltration, substantially alter the existing drainage pattern of the construction sites in a manner that would result in substantial onsite or offsite erosion or siltation, or substantially increase impervious surfaces or alter the sites in a way that contributes to the volume of stormwater runoff at the sites, and would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, no impacts would occur to hydrology and water quality.

2.1.11 Land Use and Planning

Question—Would the project:	CEQA Significance Determinations for Land Use and Planning
a) Physically divide an established community?	**No Impact**
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**

Discussion of Environmental Evaluation Questions

The proposed project would not physically divide an established community, cause changes to the site or surrounding land uses, nor conflict with land use plans and policies. It would provide a potential benefit by completing a bike bridge across the Otay River that would connect trails on the north and south sides of the river and provide bicycles a designated crossing without having to enter and exit I-805 to cross the river. There is currently no bike trail and direct route for bicyclist between Palm Avenue and Main Street. Bicycle access is permitted on the shoulders of northbound and southbound I-805, but pedestrians are not allowed on the freeway. As the bike trail would remain within Caltrans right-of-way and serve as a transportation use, no land would be converted to non-transportation uses. Therefore, construction of a bike bridge between Palm Avenue and Main Street would eliminate this problem and provide a benefit to the community.

2.1.12 Mineral Resources

Question—Would the project:	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**
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**

Discussion of Environmental Evaluation Questions

There are no designated mineral resource areas of local importance in the project area, and the proposed project would not impede the extraction of any known mineral resources. Therefore, no impacts would occur.

2.1.13 Noise

Considering the information in the Caltrans Noise Study Report for EA 11-081610: 1-805 Managed Lanes South Project, dated October 2009 and subsequent memo reviewing impact determination dated November 2022, the following significance determinations have been made:

Question—Would the project result in:	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?	**No Impact**
b) Generation of excessive groundborne vibration or groundborne noise levels?	**No Impact**
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**

Discussion of Environmental Evaluation Questions

Because existing traffic noise levels are already approaching or have exceeded the Noise Abatement Criteria (NAC) at almost all the outdoor frequent human use areas adjacent to the highway, no impacts would occur from construction or installation of the proposed project. The proposed auxiliary lanes would not be moving existing traffic volumes closer to sensitive receptors, and no widening or capacity increasing is occurring. Therefore, actions from rehabilitating assets or adding auxiliary lanes would not increase noise levels above existing conditions.

Any noise increases during construction would be temporary and BMPs described below would be used to lessen its effects. Construction noise is regulated by California Department of Transportation's Standard

Specifications, May 2006, Section 7-1.01I, Sound Control Requirements. The requirements state that construction noise levels generated during construction shall comply with applicable local, state, and federal regulations and that all equipment shall be fitted with adequate mufflers according to the manufactures' specifications. To ensure construction impacts are minimized to the extent possible, all equipment items would have manufacturer's recommended noise abatement measures such as mufflers, engine enclosures, and engine vibration isolators. All construction equipment would be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices. Any idling equipment would also be turned off when not in use.

The vibration levels created by the normal movement of vehicles including graders, front loaders, and backhoes used for construction are the same order of magnitude as the groundborne vibration created by heavy vehicles traveling on streets and highways. Therefore, operating equipment would not generate excessive groundborne noise or vibration.

2.1.14 Population and Housing

Question—Would the project:	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**
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	**No Impact**

Discussion of Environmental Evaluation Questions

The proposed project would not change accessibility or influence growth, displace people or housing, or require construction of replacement housing. As such, no impacts to population and housing would occur.

2.1.15 Public Services

Question:	CEQA Significance Determinations for 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: Fire protection?	**No Impact**
Police protection?	**No Impact**
Schools?	**No Impact**
Parks?	**No Impact**
Other public facilities?	**No Impact**

Discussion of Environmental Evaluation Questions

Construction of the proposed project would be within existing developed Caltrans right of way and would be temporary and of short duration. During construction, a traffic management plan would be in place to inform the public of closures and alternate routes and maintain the use of all public services, and public roads would remain open to emergency vehicles at all times. Construction of the proposed project would not block or slow travel along local routes of ingress and egress to the existing fire and police facilities. Therefore, no impacts would occur to public services would occur.

2.1.16 Recreation

Question—Would the project:	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**

Question—Would the project:	CEQA Significance Determinations for Recreation
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**

Discussion of Environmental Evaluation Questions

The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur. The proposed project involves the construction of a pedestrian bridge to connect existing and future trail systems and would benefit the surrounding community. As stated in the Section 4(f) No Use Determination dated December 12, 2022, the proposed project would not impact any publicly owned parks or recreation areas, as all proposed actions would take place within existing Caltrans right of way. Furthermore, the proposed project would not preclude any future connections with the planned trail projects initiated by the Otay Valley River Park (OVRP). The bike trail was identified as a proposed facility in the City of San Diego's 2011 Bicycle Master Plan and was presented at meetings with the OVRP to coordinate a bike trail connection with a future OVRP trail. A future project by the City of San Diego would extend the OVRP trail into this area and the existing maintenance access trail would then become part of the OVRP trail system. The bike bridge included in the proposed project would improve connectivity for future trails.

2.1.17 Transportation

Considering the preliminary assessment conducted by Caltrans using the guidance from the Transportation Analysis under CEQA, dated September 2020, the following significance determinations have been made:

Question—Would the project:	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?	**No Impact**
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Transportation
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**
d) Result in inadequate emergency access?	**No Impact**

Discussion of Environmental Evaluation Questions

Construction-generated traffic on roadways associated with the proposed project would include delivery of equipment and materials, worker trips to the construction area, and potential lane closures. Parking, staging, and laydown areas for construction activities would be located within closed lanes and/or existing Caltrans right of way. During construction, lane closures may be needed to facilitate work and/or create a buffer between construction personnel and traffic. Worker vehicle trips to the proposed project site would be nominal relative to existing traffic. Short-term, temporary traffic impacts resulting from construction activities are anticipated due to the confined, high traffic nature of the bridge and the need for temporary lane closures. A TMP would be prepared and implemented, which would outline appropriate traffic control measures intended to accommodate workers within the roadway, while facilitating continued circulation for road users through the work zone. Because the proposed project would not alter traffic patterns or volumes, temporary traffic impacts would cease once construction is complete. Because temporary construction impacts are anticipated with the proposed project, and a TMP would be implemented for activities disrupting the transportation system, no conflict would occur with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, and bicycle and pedestrian facilities.

To address potential short-term, temporary impacts that could result from constructing the proposed project, a TMP would be prepared and implemented during construction. The TMP would address issues related to construction staging, lane closures, and other potential traffic disruptions during construction. Implementation of the TMP would provide congestion relief, identify detour routes, and schedule activities that are likely to disrupt traffic during off-peak hours such as equipment mobilization, as feasible. Coordination with signal and ramp metering would occur to minimize traffic circulation impacts within potential closure areas. The TMP would include advanced notification to motorists, bicyclists, and pedestrians of potential delays and alternative routes, as applicable. To ensure safety for workers and motorists during construction, temporary speed reductions would likely be a measure included within the TMP. It would also include accommodation for emergency services to allow access through work zones.

Long-term traffic impacts are not anticipated because the proposed project would not alter traffic patterns or capacity. The proposed three auxiliary lanes and upgrades to TMS would improve traffic operations and operational efficiencies. The proposed auxiliary lanes, with each segment proposed at less than one mile in length, would be added in areas that have been identified to have high DVHD. Adding the auxiliary lanes would reduce the DVHD by easing merging and improving travel speeds.

Improvements to TMS would allow for operational efficiencies by providing real-time traffic and performance data. Existing TMS are at the end of their service life. Upgrades to CCTV systems, fiber optic systems, vehicle detection, traffic monitoring stations, ramp meters, traffic signals would continue to inform future operational needs and identify deficiencies.

In addition, the project would incorporate active transportation that would increase multi-modal options and may reduce vehicular travel and vehicle miles traveled. Existing curb ramps do not meet current standards. The project proposes to upgrade the existing curb ramps to allow for ease of use and access. This improvement would create accessibility and promote walking as an alternate form of travel.

Caltrans policy for all new transportation projects it funds or oversees must include “complete street” features that provide safe and accessible options for people walking, biking, and using transit. This policy would expand the availability of sustainable transportation options to help meet the state’s climate, health, and equity goals. Therefore, a bike trail, Class II, III, and IV bikeways were incorporated into numerous interchanges within the project limit. In addition, there is currently no bike trail and direct route for bicyclist between Palm Avenue and Main Street. Bicycle access is permitted on the shoulders of northbound and southbound I-805, but pedestrians are not allowed on the freeway. Therefore, construction of a bike bridge between Palm Avenue and Main Street would eliminate this problem.

The proposed project would not construct roads or other permanent features that would present hazardous roadway conditions. During construction, public roads would remain open to emergency vehicles at all times. Construction of the proposed project would not block or slow travel along local routes of ingress and egress to the existing fire and police facilities. Therefore, no impacts would occur.

Minimization measures to ensure traffic impacts resulting from construction activities would be implemented with the TMP, including appropriate staging, timing, and sequencing of activities; maintenance of traffic in both directions; and advanced notification to motorists and nearby communities to inform the public of potential delays. No additional avoidance, minimization, and/or mitigation measures are required.

2.1.18 Tribal Cultural Resources

Considering the information included in the HPSR dated August 9, 2021, the following significance determinations have been made.

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:

Question:	CEQA Significance Determinations for Tribal Cultural Resources
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	**No Impact**
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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	**No Impact**

Discussion of Environmental Evaluation Questions

The project area does not contain any tribal cultural resources 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 PRC Section 5024.1. Therefore, no impacts would occur.

2.1.19 Utilities and Service Systems

Question—Would the project:	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**

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	**No Impact**
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**
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?	**Less than Significant Impact**
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	**No Impact**

Affected Environment

A variety of utility infrastructure traverses the proposed project site. Multiple service providers, jurisdictions, and agencies own and maintain these utilities, such as AT&T and San Diego Gas & Electric (SDG&E). Improvements and additions to the existing TMS and construction of lighting for the bike bridge would use existing electrical supplies; no other utility services would be affected.

Existing water (e.g., water conveyance infrastructure, water treatment facilities), wastewater (e.g., sewer lines, storm drains, wastewater treatment facilities), and solid waste facilities are managed by the City of San Diego Public Utilities Department, Chula Vista Public Works Department, and National City Public Works Department. The Otay Water District is a water, recycled water, and sewer service provider in Chula Vista, and the Sweetwater Authority provides water service to Chula Vista and National City. The Public Works/Utilities Departments operate several major facilities to treat water and wastewater, including treatment plants, reclamation plants, biosolid treatment facilities, and pure water facilities.

Environmental Consequences

A utility review was completed for the proposed project and it was determined that there are no conflicts involved. A Utility Conflict List and Utility Maps would be used to identify and protect in place existing structures during construction. Upgrades to existing TMS elements on the existing structure and installation of new TMS improvements would require electricity to operate. These facilities currently provide power for existing lighting and TMS

elements and would be sourced to provide power to TMS improvements. TMS improvements are not anticipated to substantially increase demand beyond a capacity that existing electrical facilities could not accommodate. Water supplies are sufficient for construction and no additional needs would be required for the proposed project. The proposed project would not increase the demand for water nor would it require water supplies for long-term, operational uses. Construction activities would require a nominal amount of water consumption and wastewater disposal. Water consumption associated with the proposed project would be minor and primarily required during initial construction activities. These activities are limited and temporary in nature and would not consume water or generate wastewater in quantities that would exceed the capacity of existing treatment facilities.

The proposed project would not generate substantial amounts of solid waste for disposal during construction, and generated project waste would be disposed of at approved waste disposal sites that are able to accommodate the proposed project's needs. The proposed project would comply with federal, state, and local statutes and regulations related to solid waste. In addition, the proposed project would not generate substantial amounts of solid waste during construction and would not generate any solid waste during long-term operation after construction is complete. Therefore, the proposed project would have a less than significant impact.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance measures would be implemented to address potential impacts to utilities and emergency services during construction:

- Prior to construction activities, Caltrans would contact utility companies, DigAlert services, and/or other applicable entities to mark underground facilities, as needed.

- Emergency service providers and first responders would be notified of construction sequencing and the potential for temporary lane closures and/or changes to traffic circulation, as identified in the TMP.

2.1.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:

Question—Would the project:	CEQA Significance Determinations for Wildfire
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Wildfire
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?	**No Impact**
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?	**No Impact**
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**

Discussion of Environmental Evaluation Questions

While the proposed project is located near areas classified as very high fire hazard severity zone, project activities would occur within existing developed Caltrans right of way that is operated and maintained by Caltrans. Maintenance work and replacement of structures within the project limits would occur in the original project boundaries and would not increase capacity. The proposed project would not hinder emergency response during construction or normal operations and maintenance. Because the proposed project is on existing, developed, and relatively flat areas, the proposed project would not expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, or 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. Therefore, no impacts to wildfire are expected.

2.1.21 Mandatory Findings of Significance

Question:	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 Impact 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.)	**No Impact**
c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	**No Impact**

Affected Environment

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.

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.

Since the I-805 was first constructed, numerous projects have taken place including:

- Various concrete slab replacement projects (Most recent project EA 11-2N0074; Year 2019).
- Freeway widening to accommodate a Direct Access Ramp at East Palomar Street (EA 11-2T1824; Year 2017).
- Freeway widening between Plaza Boulevard and Sweetwater Road to accommodate one auxiliary lane in each direction (northbound and southbound) (EA 11-2T2504; Year 2016).
- Constructing HOV lanes in the northbound and southbound directions between Naples Street and SR-94 (EA 11-2T1804 and 11-2T1814; Year 2014).
- Constructing concrete median barriers prior to 2012, which were upgraded when the HOV lanes were constructed.

In addition to past projects, three projects are in final design:

- Caltrans Project 11-42901 is in a final design phase and anticipated to be in construction phase in May 2023. The project addresses numerous non-compliant pedestrian facilities at ten intersections along I-805 between PM 3.5 and 13.9. The work consists of upgrading curb ramps, new sidewalks, crosswalk striping, installing accessible pedestrian signals, replacing roadside signs, and modifying signal and lighting systems.
- Caltrans Project 11-17370 would widen the Palm Avenue Overcrossing bridge at Route 805 (PM 2.9). Additional work includes widening and realigning the northbound and southbound ramps; adding transit stops on the on-ramps: providing Class IV Separated Bikeways, new sidewalks, and curb ramps for pedestrians and bicycles in both directions along Palm Ave; incorporating guardrail, worker safety improvements, signal and lighting systems, wrong-way prevention striping, a retaining wall, and other improvements. The Palm Avenue project is in final design phase and scheduled to begin construction in April 2024. In the future when funding becomes available, this project will move forward with design for the

Ultimate Phase, which will include further bridge and ramp widenings, worker safety elements, and other operational and safety improvements.

- Caltrans Project 11-2T3431 would add four new sound walls from PM 5.1 to PM 8.3. Additional work includes extending a northbound auxiliary lane from the Palomar Street Overcrossing to Telegraph Canyon Road; two bridge widenings at Naples Street Undercrossing and Telegraph Canyon Road Undercrossing; a retaining wall/sound wall extension near the Palomar DAR; minor complete street enhancements on Naples St and Telegraph Canyon Road. This sound wall project is in the final design phase and schedule to begin construction in October 2023.

- Caltrans Project 11-11-422704) is a Bus On Shoulder (BOS) project that is currently in operation along I-805 as a part-time Transit Only Lane Demonstration Project. This project allows for San Diego Metropolitan Transit System busses to operate on the shoulders of I-805 from Plaza Boulevard to State Route 94 during weekday peak travel times. The demonstration period for the BOS project operations is planned to extend until summer of 2025.

Environmental Consequences

The proposed project site is located within an urbanized and existing setting, and does not involve significant changes to the existing use of the infrastructure or surrounding land uses. It would not substantially degrade the environment, or eliminate important examples of California history. The proposed project involves construction activity within existing developed Caltrans facilities. The level of construction required by the proposed project would be minimal, resulting in minor temporary and short-term activities, and the proposed project would not affect current operations and maintenance activities. The following discussion details the resources evaluated for cumulative impacts.

Aesthetics

When analyzing cumulative visual impacts, it is important to consider those projects that could alter the existing visual environment with the same viewshed as the proposed project. Other cumulative projects could contribute to short-term visual effects by adding more construction equipment in the general area but this would not be a significant visual intrusion within the overall viewshed and would not be out of place within the urbanized areas along the proposed project limits. The visual effects from various construction projects could be considered noticeable but not out of context with an urban roadway feature and surrounding urban development and would be temporary during the implementation phase and would not be substantial.

The proposed bike trail and associated retaining walls would be below the freeway and not impact offsite views for freeway users. The bike trail bridge would benefit trail users with scenic views at the Otay River crossing, and the forms, textures, and colors chosen for the structures, hardscape and plant

palette would blend with the muted earth tones and textures already present on the site. The most dramatic elements of the proposed improvements, the retaining walls and the removal of the existing eucalyptus stands, would be effectively mitigated by the minimization measures. The walls would be given a more human scale with the application of surface textures, and architectural elements where appropriate. The removal of the eucalyptus trees would be compensated by new trees, shrubs, and groundcover planted throughout all disturbed landscape areas.

The analysis above considers the potential cumulative effects for the proposed project. With the implementation of standardized measures, as well as specific avoidance and minimization measures, impacts associated with the proposed project would not be considered cumulatively considerable and cumulative impacts would be less than significant.

Construction of the proposed project would be temporary and short term, and with the inclusion of appropriate avoidance and minimization measures, the proposed project would not have a considerable contribution to cumulative impacts. Therefore, there is no impact.

Air Quality

The proposed project site is located in San Diego County within the SDAB, and, as the proposed project is categorically exempt under NEPA, it is considered exempt from conformity requirements. According to the FHWA's Interim Guidance (2016), the proposed project is classified as a category 1 project (Projects with No Meaningful Potential MSAT Effects, or Exempt Projects).

The proposed project could generate fugitive dust associated with construction equipment from temporary construction activities. These potential impacts contribute to overall impacts to the SDAB. The proposed project would comply with construction standards adopted by the SDAPCD as well as Caltrans standardized procedures for minimizing air pollutants during construction.

The analysis of air quality provided in Section 2.1.3, Air Quality, considers the emissions of traffic generated by existing and future planned land uses and the effects of other future planned transportation improvements. Temporary air quality impacts would be minimized through implementation of dust control and equipment management measures. The proposed project would not contribute to cumulative air quality effects because it would not violate air quality standards, would not contribute substantially to an existing air quality violation, and would not expose sensitive receptors to substantial pollutant concentrations.

Biological Resources

The proposed project may result in permanent impacts to 0.0009 acres of riparian habitat in the Otay River valley if Variation 2 is chosen and would require compensatory mitigation. Temporary impacts to 1.14 acres of riparian

habitat may also occur if Variation 2 is chosen. Avoidance and minimization measures would reduce temporary impacts to less than significant and mitigation would compensate for unavoidable permanent impacts. Construction impacts could cause disturbance and temporary loss of habitat for the Least Bell's Vireo; however, impacts are expected to be minimal, relative to the available habitat. In addition, no net loss of habitat would occur as result of onsite habitat restoration. Although indirect effects including stressors from project construction may occur within suitable habitats, the implementation of avoidance and minimization measures and beneficial design features would avoid and minimize impacts to suitable habitat for this species. Due to the limited acreage of vireo habitat impacted in comparison to the available habitat and the distribution of these impacts along an existing highway in an urban area, the proposed action is not expected to appreciably reduce the numbers, reproduction, or distribution of the least Bell's vireo population in this region of San Diego County. As such, the proposed project contribution to short-term impacts to biological resources would not be cumulatively considerable.

Cultural Resources

Cumulative impacts to archaeological resources would be expected to be fully avoided, minimized, or mitigated, and critical information regarding regional prehistory preserved and/or documented. Thus, the proposed project would not make a cumulatively considerable contribution to a significant cumulative impact related to cultural recourses. A less than significant impact would result.

Hazards and Hazardous Materials

Although potential exposure of hazardous materials may occur during project construction, implementation of standardized and non-standardized measures would minimize and avoid these impacts. Typical hazardous materials used during construction (e.g., solvents, paints, and fuels) would be managed in accordance with Caltrans standard provisions and other regulatory requirements and are not anticipated to compromise worker's health and safety. Applicable state and federal regulations, permit conditions, and Caltrans standard and nonstandard special provisions for the use, handling, disposal, waste, storage, and transport of potentially hazardous materials during construction of the proposed project would minimize potential for accidental exposure of people or the environment to hazardous materials. As such, the proposed project contribution related to hazardous waste and materials would not be cumulatively considerable.

Traffic and Transportation/Pedestrian and Bicycle Facilities

Impacts on vehicular traffic associated with the proposed project would intermittently and temporarily generate increases in vehicle trips by construction workers, construction vehicles, and traffic congestion during construction within the proposed project site roadways. However, the implementation of a TMP would minimize short-term impacts to vehicular transportation and to non-

motorized users in the surrounding areas during construction and impacts would be less than significant. There is currently no bike trail and direct route for bicyclist between Palm Avenue and Main Street. Bicycle access is permitted on the shoulders of northbound and southbound I-805, but pedestrians are not allowed on the freeway. The proposed project would provide a potential benefit by completing a bike bridge across the Otay River that would connect trails on the north and south sides of the river and provide bicycles a designated crossing without having to enter and exit I-805 to cross the river. Therefore, construction of a bike bridge between Palm Avenue and Main Street would eliminate this problem and provide a benefit to the community.

Future Projects

The projects discussed above would not be considered cumulatively considerable and cumulative impacts would be less than significant.

Avoidance, Minimization, and/or Mitigation Measures

No significant impacts or cumulative impacts would result from the proposed project, and no mitigation measures are required.

Appendix A Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

September 2021

NON-DISCRIMINATION 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; PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

"Provide a safe and reliable transportation network that serves all people and respects the environment."