WILLOW SLOUGH
BRIDGE REPLACEMENT PROJECT

INITIAL STUDY

with Proposed Negative Declaration

SACRAMENTO COUNTY, CALIFORNIA

DISTRICT 3–SAC–99

Post Miles 6.04 to 7.06

EA 03-1J630 / EFIS 0321000023

Prepared by the
State of California Department of Transportation

January 2024

General Information About This Document

What is in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study with proposed Negative Declaration (IS/ND) which examines the potential environmental effects of the proposed Willow Slough Bridge Replacement Project on State Route (SR) 99 in Sacramento County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts of the project, and proposed avoidance, minimization, and/or mitigation measures.

What should you do?

- Please read this document.
- Additional copies of this document and related technical studies are available for review upon request.
- A printed copy of this document is available at Elk Grove Library, located at 8900 Elk Grove Boulevard, Elk Grove, CA 95624.
- We'd like to hear what you think. If you have any comments about the proposed project, please send your written comments to Caltrans by the deadline–February 9, 2024.
- Please send comments via U.S. mail to:

  California Department of Transportation
  Attention: Environmental Branch Chief, Unit M5
  North Region Environmental–District 3
  703 B Street
  Marysville, CA 95901

- Send comments via e-mail to: Willow.Slough.ED@dot.ca.gov
- Be sure to send comments by the deadline: February 9, 2024

What happens after this?

After comments are received from the public and 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 obtained, Caltrans could complete the design and construct all or part of the project.

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: Stacie Gandy, EEO/Safety Office, 703 B Street, Marysville, CA 95901; (530) 218-0632 (Voice) or use the California Relay Service (800) 735-2929 (TTY to Voice), (800) 735-2922 (Voice to TTY) or 711.

WILLOW SLOUGH
BRIDGE REPLACEMENT PROJECT

Replace the existing southbound Willow Slough Bridge on State Route 99 in Sacramento County, from post miles 6.04 to 7.06, approximately 6 miles north of the Sacramento and San Joaquin county line.

INITIAL STUDY
with Proposed Negative Declaration

Submitted Pursuant to: Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

01/05/2024
Date of Approval

Mike Bartlett
Mike Bartlett, Office Chief
North Region Environmental-District 3
California Department of Transportation
CEQA Lead Agency

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

North Region Environmental–District 3
Attn: Environmental Branch Chief, Unit M5
703 B Street
Marysville, CA 95901
(530) 812-4371or use the California Relay Service TTY number, 711 or 1-800-735-2922.

PROPOSED NEGATIVE DECLARATION

Pursuant to: Division 13, California Public Resources Code

SCH Number: Pending

Project Description

The California Department of Transportation (Caltrans) proposes to replace the existing southbound Willow Slough Bridge (Left Bridge–Bridge No. 24-0046L) with a new bridge on SR 99 from post miles (PMs) 6.04 to 7.06, approximately 6 miles north of the Sacramento and San Joaquin county line. The proposed scope of work includes constructing a new bridge at a higher elevation to match the existing northbound bridge elevation (Right Bridge–Bridge No. 24-0046R) at Willow Slough. The new Left Bridge will be designed to be raised in the future with the two bridges separated by a physical gap. In addition, this project would install Transportation Management System (TMS) elements including a Type III-AF service equipment enclosure, a high-speed weigh-in-motion system controller and cabinet, and closed-circuit television camera on a 90-foot-tall pole, remove the existing Thrie beam guardrail, and place a Type 842 Concrete Barrier for each bridge. The project would require one temporary construction easement; however, no acquisition of new permanent right of way would be needed.

Determination

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

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

The project would have *No Impact* on:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Land Use and Planning

- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

The project would have *Less than Significant Impacts* to:

- Biological Resources
- Greenhouse Gas Emissions
- Hydrology and Water Quality

Mike Bartlett

Mike Bartlett, Office Chief
North Region Environmental–District 3
California Department of Transportation

01/05/2024

Date

Table of Contents

List of Appendices

List of Figures

List of Tables

Acronyms and Abbreviated Terms

Acronym/Abbreviation	Description
AADT	Average Annual Daily Traffic
AB	Assembly Bill
BMPs	Best Management Practices
BO	Biological Opinion
BSA	Biological Study Area
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CAL-CET	Caltrans Construction Emissions Tool
CAL EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAPTI	Climate Action Plan for Transportation Infrastructure
CARB	California Air Resources Board
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH_4	methane
CIA	Cumulative Impact Analysis
CNPS	California Native Plant Society
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CTP	California Transportation Plan
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
Department	Caltrans
DES	Division of Engineering Services
DNAC	District Native American Coordinator

Acronym/Abbreviation	Description
DOT	Department of Transportation
DP	Director's Policy
DPS	Distinct Population Segment
DWR	Department of Water Resources
ECL	Environmental Construction Liaison
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EO(s)	Executive Order(s)
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESA(s)	Environmentally Sensitive Area(s)
ESL	Environmental Study Limits
ESU	Evolutionarily Significant Unit
ºF	degrees Fahrenheit
FED	Final Environmental Document
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FP	Fully Protected (species listing status)
FR	Federal Register
GDP	Gross Domestic Product
GGS	Giant garter snake
GHG	Greenhouse gas
GWP	Global Warming Potential
H&SC	Health & Safety Code
HFCs	hydrofluorocarbons
HVF	High-Visibility Fencing
IPaC	Information for Planning and Consultation
IS	Initial Study
ISAC	Invasive Species Advisory Committee
IS/ND	Initial Study / Negative Declaration
LCFS	Low Carbon Fuel Standard
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act

Acronym/Abbreviation	Description
MLD	Most Likely Descendent
MMT	million metric tons
$MMTC0_2e$	million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act of 1990
NAHC	Native American Heritage Commission
NB	Northbound
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHTSA	National Highway Traffic and Safety Administration
NISC	National Invasive Species Council
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
O_3	ozone
OHWM	Ordinary High Water Mark
OPR	Governor's Office of Planning and Research
PDT	Project Development Team
PM(s)	post mile(s)
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
Project	Willow Slough Bridge Replacement Project
PRC	Public Resources Code (California)
RC	Reinforced Concrete
RHMA	Rubberized Hot Mix Asphalt
ROW	Right of Way
RTL	Ready to List
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency

Acronym/Abbreviation	Description
SACOG	Sacramento Council of Governments
SAFE	Safer Avoidable Fuel-Efficient (vehicles)
SB	Senate Bill
SB	Southbound
SCS	Sustainable Communities Strategy
SF_6	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SLR	Sea Level Rise
SNC(s)	Sensitive Natural Community(ies)
SO_2	sulfur dioxide
SPCC Plan	Spill Prevention, Control, and Countermeasures Plan
SR	State Route
SRA	State Responsibility Area
SSC	Species of Special Concern
STAA	Surface Transportation Assistance Act
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCE	Temporary Construction Easement
TDM	Transportation Demand Management
THVF	Temporary High Visibility Fencing
TMDLs	Total Maximum Daily Loads
TMP	Transportation Management Plan
TMS	Transportation Management System
U.S. or US	United States
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled
WOTUS	Waters of the U.S.
WPCP	Water Pollution Control Program

Chapter 1. Proposed Project

1.1 Introduction

State Route (SR) 99 serves interregional travel north and south of the Central Valley, connecting rural communities with larger metropolitan areas. SR 99 allows goods to be easily transported to many areas. Truck traffic within the project limits averages 14.9% of the total Average Annual Daily Traffic (AADT). SR 99 is a part of the Surface Transportation Assistance Act (STAA) National Network, which permits larger trucks to traverse the route. Movement of goods is essential to the economies of California and the nation, with approximately one third of the state's economy directly supported by the freight industry.

Within the project limits, SR 99 is classified as a freeway in the Transportation Concept Report. In District 3, SR 99 extends from the San Joaquin/Sacramento county line in the south, to the Butte/Tehama county line in the north. The proposed project is in rural Sacramento County from post miles (PMs) 6.04 to 7.06 (Figure 1).

The existing roadway geometry is a divided four-lane freeway with a bridge structure on both the northbound and southbound sides of the freeway. The posted speed limit is 65 miles per hour within the project limits. Currently, there are no Transportation Management Systems (TMS) elements within the project vicinity to manage traffic network operations. TMS elements are used to collect traffic volume information.

The Willow Slough Bridge (Bridge No. 24-0046L) serves southbound (SB) traffic. It is located at PM 6.54, approximately 6 miles north of the San Joaquin/Sacramento county line. The bridge is an aging structure that has exceeded its design life. Willow Slough Bridge is a reinforced concrete, continuous slab structure built in 1927 and was widened in 1957 to its current dimensions. This structure is 60.7-feet-long and 37.7-feet-wide. The existing foundation consists of reinforced concrete (RC) pile extension bents and RC pile extension abutments with monolithic wingwalls on RC piles. The existing roadway within and near the project is a 4-lane freeway with two 12-foot-wide lanes and 8-foot-wide shoulders. The bridge has two 12-foot-wide lanes, with shoulders that narrow to 2-feet-wide with bridge railing on both sides. The road surface sits approximately 2 feet lower than the northbound bridge (Bridge No. 24-0046R), also built in 1927.

The Department of Transportation (Caltrans) is the Lead Agency for this project under the California Environmental Quality Act (CEQA).

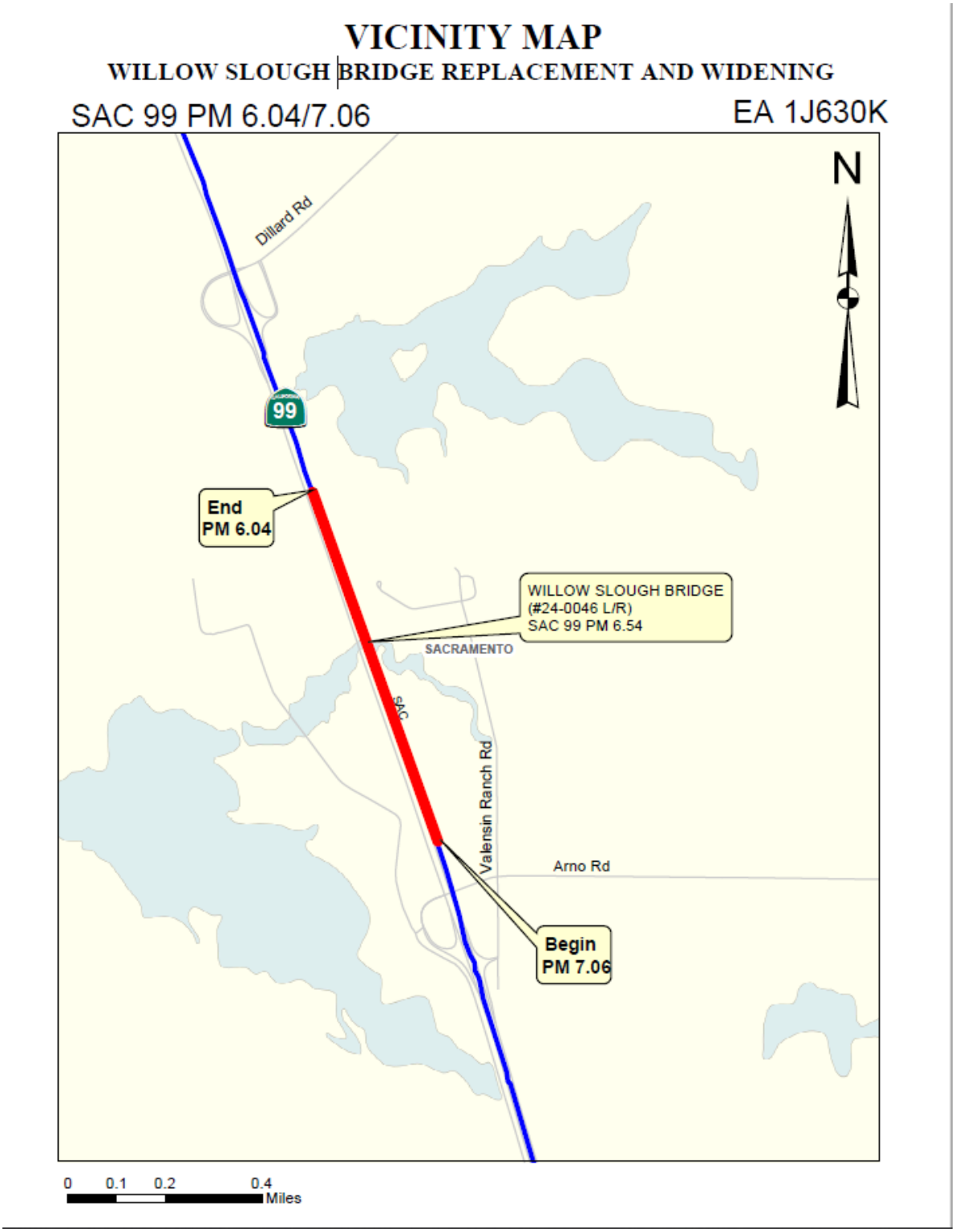

Figure 1. Project Vicinity

Figure 2. Project Location Map

1.2 Purpose and Need

Purpose

The purpose of the proposed project is to bring the southbound Willow Slough Bridge (Bridge No. 24-0046L) up to current design standards, mainline geometry, and provide sufficient shoulder space. The purpose of the project is also to better capture traffic data used for corridor capacity management plans.

Need

The southbound Willow Slough Bridge was built in 1927 and has exceeded its design life. The bridge needs to be rehabilitated or replaced to meet seismic standards. Traffic volume information and network functions are not detected within the project limits.

1.3 Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are Build Alternative and No-Build Alternative.

No-Build Alternative

The No-Build Alternative would maintain the facility in its current condition and would not meet the purpose and need of the project. Under the No-Build Alternative, no alterations to the existing conditions would occur and the proposed improvements would not be implemented.

Build Alternative

The proposed project would replace the existing southbound Willow Slough Bridge with a new bridge that would be raised in profile to match the existing profile of the northbound bridge. The northbound bridge (Bridge No. 24-0046R) would be widened toward the median to meet current design standards; a physical gap would remain between the southbound and northbound bridges. Approximately 0.16 acres of permanent earthen fill for bridge support would be added in the slough. The project would increase the impervious surface area of SR 99 by 1.66 acres with temporary surface added for the construction access road, which would be removed upon completion of construction.

The constructed bridge would include 1.5 acres of additional impervious surface area. In addition, the existing Thrie beam guardrail would be removed and replaced with a Type 842 Concrete Barrier on each bridge (at the center median of the northbound bridge and on both sides of the new southbound bridge). This project proposes to install Transportation Management System (TMS) elements including a Type III-AF service equipment enclosure, a high-speed weigh-in-motion system controller and cabinet, and closed-circuit television camera on a 90-foot-tall pole. The project would require one temporary construction easement (TCE) for construction storage, parking, and off-highway access to the bridge; no permanent acquisition of right of way (ROW) would be needed.

Temporary construction access roads would be constructed on the east and west sides of SR 99, north of the bridges, to allow equipment and materials to be placed within the ROW for use during construction. An existing culvert, which spans the ROW along the existing northerly earthen fill of both the northbound and southbound bridges, would be cut and removed for construction, and replaced once the access roads are removed. Approximately 1.66 acres of fill would be placed for the access roads, which would be compacted and removed upon completion of construction.

Alternatives Considered but Eliminated from Further Consideration

Accommodation for Future Project State Route 99 Grade Raise Project (EA 03-4J480)

At the May 11, 2023, Project Development Team (PDT) meeting for the Willow Slough Bridge Replacement Project, the *State Route 99 Grade Raise Project (Grade Raise Project)* (EA 03-4J480) was introduced. The *Grade Raise Project* is planned between PMs 5.5 and 7.75, overlapping the Willow Slough Bridge Replacement Project. The *Grade Raise Project* draft scope proposes to raise the profile of SR 99 to the approximate elevation of 45 feet above sea level within the project limits of the Willow Slough Bridge Replacement Project, which includes a proposed profile elevation of about 42.89 feet. The Project Manager instructed the PDT to continue to work on the project with the scope unchanged and consider future project constraints.

A subsequent PDT meeting was held on May 17, 2023, between Design, the Division of Engineering Services (DES), Asset Management, and the Project Manager to discuss the most suitable bridge design that would facilitate raising the newly constructed southbound bridge in the future to match the projected higher roadway profile, as per the *Grade Raise Project* scope. The following two options for bridge design and stage construction were discussed:

Option 1

Change bridge configuration for the left bridge from a multi-span to a single-span bridge. The new left bridge would still be built to match the elevation of the existing right bridge, however the single-span bridge would be easier to raise in the future to match the new roadway profile than a multi-span bridge. Additionally, there would be no closure pour between the left and right bridges to connect them as a single structure.

Option 2

Replace both left and right bridges to the raised profile elevation as dictated by the *Grade Raise Project*. This option would require roadway geometric design at the approaches and create a crest effect at the Willow Slough Bridge. This option was rejected from further consideration in a PDT meeting on June 15, 2023.

Reversible Lanes

This project does not qualify as a capacity increasing or a major street or highway realignment project, thus reversible lanes were not considered.

1.4 General Plan Description, Zoning, and Surrounding Land Uses

The Willow Slough Bridge Replacement Project location is identified in the 2030 Sacramento County General Plan as being in a flood zone (100-year floodplain, Zone A) (Sacramento County General Plan of 2005-2030, 2011). Property to the west of the project (Assessor's Parcel Number [APN] 134-0270-017-0000) is government owned and is not bound by a Williamson Act contract (Sacramento County General Plan of 2005-2030, 2011). The parcel is part of the General Plan as a Natural Preserve and is protected by a Resource Conservation Area. The land is not part of a Community Plan Land Use area. It is zoned Agricultural–20 Acres.

Property to the east of the project (APN 134-0280-082-0000) is identified in the General Plan as Agricultural Cropland. It is not part of a Community Plan Land Use area. This parcel is within the boundaries of the South Sacramento Habitat Conservation Plan. This parcel is bound under an active Williamson Act contract (No. 72-AP-131). It is zoned Agricultural–80 Acres and Agricultural–20 Acres.

1.5 Permits and Approvals Needed

The following table (Table 1) indicates the permitting agency, permits/approvals and status of permits required for the project.

Table 1. Agency, Permit/Approval and Status

Agency	Permit/Approval	Status
California Department of Fish and Wildlife (CDFW)	1600 Lake and Streambed Alteration Agreement	Anticipated submittal date 05/01/2024
State Water Resources Control Board (SWRCB)	Construction General Permit	Coordinated After Ready To List (RTL) milestone
Regional Water Quality Control Board (RWQCB)	Clean Water Act (CWA) Section 401 Certification	Anticipated submittal date 05/01/2024
U.S. Army Corps of Engineers (USACE)	Clean Water Act (CWA) Section 404 Permit	Anticipated submittal date 05/01/2024
U.S. Fish and Wildlife Service (USFWS)	Section 7 Federal Endangered Species Act (FESA) Consultation/Biological Opinion	Anticipated issuance date 11/13/2024

1.6 Standard Measures and Best Management Practices Included in All Alternatives

Under CEQA, "mitigation" is defined as avoiding, minimizing, rectifying, reducing/ eliminating, and compensating for an impact. In contrast, Standard Measures and Best Management Practices (BMPs) are prescriptive and sufficiently standardized to be generally applicable, and do not require special tailoring for a project. They are measures that typically result from laws, permits, agreements, guidelines, and resource management plans. For this reason, the measures and practices are not considered "mitigation" under CEQA; rather, they are included as part of the project description in environmental documents.

The following section provides a list of project features, standard practices (measures), and Best Management Practices (BMPs) that are included as part of the project description. These avoidance and minimization measures are prescriptive and sufficiently standardized to be generally applicable and do not require special tailoring to a project situation. These are generally measures that result from laws, permits, guidelines, resource management plans, and resource agency directives and policies. They predate the project's proposal and apply to

all similar projects. For this reason, these measures and practices do not qualify as project mitigation, and the effects of the project are analyzed with these measures in place.

Standard measures relevant to the protection of natural resources deemed applicable to the proposed project include:

Aesthetics Resources

AR-1: Temporary access roads, construction easements, and staging areas that were previously vegetated would be restored to a natural contour and revegetated with regionally appropriate native vegetation.

AR-2: Where feasible, guardrail terminals would be buried; otherwise, an appropriate terminal system would be used, if appropriate.

AR-3: Where feasible, construction lighting would be limited to within the area of work.

AR-4: Where feasible, the removal of established trees and vegetation would be minimized. Environmentally sensitive areas would have Temporary High Visibility Fencing (THVF) installed before start of construction to demarcate areas where vegetation would be preserved and root systems of trees protected.

Biological Resources

BR-1: General

Before start of work, as required by permit or consultation conditions, a Caltrans biologist or Environmental Construction Liaison (ECL) would meet with the contractor to brief them on environmental permit conditions and requirements relative to each stage of the proposed project, including, but not limited to, work windows, drilling site management, and how to identify and report regulated species within the project areas.

BR-2: Animal Species

A. To protect migratory and nongame birds (occupied nests and eggs), if possible, vegetation removal would be limited to the period outside of the bird breeding season (removal would occur between September 16 and January 31). If vegetation removal is required during the breeding season, a nesting bird survey would be conducted by a qualified biologist within one week prior to vegetation removal. If an active nest is located, the biologist

would coordinate with CDFW to establish appropriate species-specific buffer(s) and any monitoring requirements. The buffer would be delineated around each active nest and construction activities would be excluded from these areas until birds have fledged, or the nest is determined to be unoccupied.

B. Bird Exclusion Plan would be prepared by a qualified biologist prior to construction. Exclusion devices would be designed so they would not trap or entangle birds or bats. Exclusion devices would be installed outside of the breeding season (September 16 through January 31) to eliminate the re-occupancy of existing structures by migratory bird species that may attempt to nest on the structure during construction. On structures or parts of structure where it is not feasible to install bird exclusion devices, partially constructed and unoccupied nests within the construction area would be removed and disposed of on a regular basis throughout the breeding season (February 1 through September 15 with biologist discretion) to prevent their occupation. Nest removal would be repeated weekly under guidance of a qualified biologist to ensure nests are inactive prior to removal.

C. Bat Exclusion Plan would be prepared by a qualified biologist prior to construction. Exclusion devices would be designed so they would not trap or entangle bats or birds. The Bat Exclusion Plan would include guidelines for appropriate date of exclusion and temperature parameters based on bridge type, geographic location, and species present. At the direction of a qualified biologist, exclusion devices would be installed after the maternity season but before hibernation. If overlapping resources are present (e.g., nesting birds), coordination between the Bat Exclusion Plan and any other relevant plans would occur. Measures would be monitored by a qualified biologist.

D. To prevent attracting corvids (birds of the Corvidae family which include jays, crows, and ravens), no trash or foodstuffs would be left or stored on-site. All trash would be deposited in a secure container daily and disposed of at an approved waste facility at least once a week. Also, on-site workers would not attempt to attract or feed any wildlife.

E. Artificial night lighting may be required. To reduce potential disturbance to sensitive resources, lighting would be temporary, and directed specifically on

the portion of the work area actively under construction. Use of artificial lighting would be limited to Cal/OSHA work area lighting requirements.

F. Limited Operating Period would be observed, whereby all construction activities would occur during daytime hours and between May 1 and October 1, which is the time of year when migratory and/or listed species would not be expected to have dependent young.

BR-3: Invasive Plant Species

Invasive non-native plant species control would be implemented. Measures would include:

- Straw, straw bales, seed, mulch, or other material used for erosion control or landscaping which would be free of noxious weed seed and propagules.

- All equipment would be thoroughly cleaned of all dirt and vegetation prior to entering the job site to prevent importing invasive non-native species. Project personnel would adhere to the latest version of the *California Department of Fish and Wildlife Aquatic Invasive Species Cleaning/Decontamination Protocol (Northern Region)* (CDFW 2016) for all field gear and equipment in contact with water.

BR-4: Plant Species, Sensitive Natural Communities, and ESHA

A. A Revegetation Plan would be prepared which would include a plant palette, establishment period, watering regimen, monitoring requirements, and pest control measures. The Revegetation Plan would also address measures for wetland and riparian areas temporarily impacted by the project.

B. Prior to the start of work, Temporary High Visibility Fencing (THVF) and/or flagging would be installed around sensitive natural communities, environmentally sensitive habitat areas, rare plant occurrences, intermittent streams, and wetlands and other waters, where appropriate. No work would occur within fenced/flagged areas.

C. After completion, all superfluous construction materials would be completely removed from the site. The site would then be restored by regrading and stabilizing with a hydroseed mixture of native species along with fast growing sterile erosion control seed, as required by the Erosion Control Plan.

BR-5: Wetlands and Other Waters

A. Prior to any water diversion, the contractor would be required to prepare and submit a Temporary Water Diversion System Plan to Caltrans for approval. Water generated from the diversion operations would be pumped and discharged according to the approved plan and applicable permits.

B. Construction activities performed above the ordinary high water mark of a watercourse that could potentially directly impact surface waters (i.e., soil disturbance that could lead to turbidity) would be performed during the dry season, typically between June through October, or as weather permits per the authorized contractor-prepared Storm Water Pollution Prevention Plan (SWPPP), Water Pollution Control Program (WPCP),) and/or project permit requirements.

C. See BR-4 for Temporary High Visibility Fencing (THVF) information.

Cultural Resources

CR-1: Caltrans would coordinate with the **Wilton Rancheria Tribe** and incorporate measures to protect tribal resources, including potential work windows associated with tribal ceremonies.

CR-2: An archaeological monitor and Wilton Rancheria tribal monitor would be used during ground-disturbing activities.

CR-3: If cultural materials are discovered during construction, work activity within a 60-foot radius of the discovery would be stopped and the area secured until a qualified archaeologist can assess the nature and significance of the find in consultation with the State Historic Preservation Officer (SHPO).

CR-4: If human remains and related items are discovered on private or State land, they would be treated in accordance with State Health and Safety Code § 7050.5. Further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to California Public Resources Code (PRC) § 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD).

Human remains and related items discovered on federally-owned lands would be treated in accordance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (23 USC 3001). The procedures for dealing with the discovery of human remains, funerary objects, or sacred objects on federal land are described in the regulations that implement NAGPRA 43 CFR Part 10. All work in the vicinity of the discovery shall be halted and the administering agency's archaeologist would be notified immediately. Project activities in the vicinity of the discovery would not resume until the federal agency complies with the 43 CFR Part 10 regulations and provides notification to proceed.

Geology, Seismic/Topography, and Paleontology

GS-1: The project would be designed to minimize slope failure, settlement, and erosion using recommended construction techniques and Best Management Practices (BMPs). New earthen slopes would be vegetated to reduce erosion potential.

GS–2: In the unlikely event that paleontological resources (fossils) are encountered, all work within a 60-foot radius of the discovery would stop, the area would be secured, and the work would not resume until appropriate measures are taken.

Greenhouse Gas Emissions

GHG-1: Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality (Caltrans Standard Specification [SS] 14-9).

GHG-2: Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than 5 minutes.

GHG-3: Caltrans Standard Specification "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board (CARB) (Caltrans SS 7-1.02C).

GHG-4: Use of a Transportation Management Plan (TMP) to minimize vehicle delays and idling emissions. As part of this, construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along the highway during peak travel times.

GHG-5: All areas temporarily disturbed during construction would be revegetated with appropriate native species. Landscaping reduces surface warming and, through photosynthesis, decreases CO_2. This replanting would help offset any potential CO_2 emissions increase.

Hazardous Waste and Material

HW-1: Per Caltrans requirements, the contractor(s) would prepare a project-specific Lead Compliance Plan (CCR Title 8, § 1532.1, the "Lead in Construction" standard) to reduce worker exposure to lead-impacted soil. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of materials containing lead.

HW-2: When identified as containing hazardous levels of lead, traffic stripes would be removed and disposed of in accordance with Caltrans Standard Special Provision (SSP) "Remove Yellow Traffic Stripes and Pavement Markings with Hazardous Waste Residue" (SSP 14-11.12).

HW-3: If treated wood waste (such as removal of sign posts or guardrail) is generated during this project, it would be disposed of in accordance with Standard Specification "Treated Wood Waste."

HW-4: If asbestos-containing material is removed during this project, it would be removed and disposed of in accordance with SSP 14–11.16 Asbestos-containing Construction Materials in Bridges.

Hydrology and Floodplain

HF-1: The proposed bridge would maintain the same elevation above the ordinary high water mark (OHWM) as the existing bridge, and no new structures would be placed which would result in a substantial backflow during a flood event.

Utilities and Emergency Services

UE-1: All emergency response agencies in the project area would be notified of the project construction schedule and would have access to SR 99 throughout the construction period.

UE-2: Caltrans would coordinate with utility providers to plan for relocation of any utilities to ensure utility customers would be notified of potential service disruptions before relocation.

UE-3: The contractor would be required to submit a jobsite fire prevention plan as required by Cal/OSHA before starting job site activities. In the event of an emergency or wildfire, the contractor would cooperate with fire prevention authorities.

Water Quality and Stormwater Runoff

WQ-1: The project would comply with the provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2022-0033-DWQ), effective January 1, 2023. If the project results in a land disturbance of one acre or more, coverage under the Construction General Permit (CGP) (Order 2022-0057-DWQ) is also required.

Before any ground-disturbing activities, the contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP) (per the Construction General Permit Order 2022-0057-DWQ) or Water Pollution Control Program (WPCP) (projects that result in a land disturbance of less than one acre) that includes erosion control measures and construction waste containment measures to protect Waters of the State during project construction. For SWPPP projects (which are governed according to both the Caltrans NPDES permit and the Construction General Permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES and CGP and the corresponding requirements of those permits are adhered to. For WPCP projects (which are governed according to the Caltrans NPDES permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES permit is adhered to.

The SWPPP or WPCP would identify the sources of pollutants that may affect the quality of stormwater; include construction site Best Management Practices (BMPs) to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management; include non-stormwater BMPs; and include

routine inspections and a monitoring and reporting plan. All construction site BMPs would follow the latest edition of the *Caltrans Storm Water Quality Handbooks: Construction Site BMPs Manual* to control and reduce the impacts of construction-related activities, materials, and pollutants on the watershed.

The project SWPPP or WPCP would be continuously updated to adapt to changing site conditions during the construction phase.

Construction may require one or more of the following temporary construction site BMPs:

- Any spills or leaks from construction equipment (e.g., fuel, oil, hydraulic fluid, and grease) would be cleaned up in accordance with applicable local, state, and/or federal regulations.

- Clean groundwater generated from the dewatering operations could be discharged on-site for dust control and/or to an infiltration basin if the quantity is below thresholds set by the local Regional Water Quality Control Board. Generated groundwater above acceptable thresholds or that comes into contact with a pollutant requires Waste Discharge Permit approval prior to discharging to land.

- Temporary sediment control and soil stabilization devices would be installed.

- Existing vegetated areas would be maintained to the maximum extent practicable.

- Clearing, grubbing, and excavation would be limited to specific locations, as delineated on the plans, to maximize the preservation of existing vegetation.

- Vegetation reestablishment or other stabilization measures would be implemented on disturbed soil areas, per the Erosion Control Plan.

- For SWPPP projects (which are governed according to both the Caltrans NPDES permit and the Construction General Permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES and CGP and the corresponding requirements of these permits are adhered to. For WPCP projects (which are governed according to the Caltrans NPDES permit), soil

disturbance is permitted to occur year-round as long as the Caltrans NPDES permit is adhered to.

WQ-2: The project would incorporate pollution prevention and design measures consistent with the *2016 Caltrans Storm Water Management Plan* (Caltrans 2016). This plan complies with the requirements of the Caltrans Statewide NPDES Permit (Order 2022-0033-DWQ).

The project design may include one or more of the following:

- Vegetated surfaces would feature native plants, and revegetation would use the seed mixture, mulch, tackifier, and fertilizer recommended in the Erosion Control Plan prepared for the project.
- Where possible, stormwater would be directed in such a way as to sheet flow across vegetated slopes, thus providing filtration of any potential pollutants.

Wildfire

WF-1: Caltrans 2018 revised Standard Specification 7-11.02M (2) mandates fire prevention procedures during construction, including a Fire Prevention Plan.

1.7 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation supporting a Categorical Exclusion determination will be prepared in accordance with the National Environmental Policy Act. 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 National Marine Fisheries Service and the United States Fish and Wildlife Service—in other words, species protected by the Federal Endangered Species Act).

Chapter 2. CEQA Environmental Checklist

Environmental Factors Potentially Affected

The environmental factors noted below would be potentially affected by this project. Please see the CEQA Environmental Checklist on the following pages for additional information.

Table 2. Environmental Factors Potentially Affected

Potential Impact Area	Impacted: Yes / No
Aesthetics	No
Agriculture and Forest Resources	No
Air Quality	No
Biological Resources	Yes
Cultural Resources	No
Energy	No
Geology and Soils	No
Greenhouse Gas Emissions	Yes
Hazards and Hazardous Materials	No
Hydrology and Water Quality	Yes
Land Use and Planning	No
Mineral Resources	No
Noise	No
Population and Housing	No
Public Services	No
Recreation	No
Transportation	No
Tribal Cultural Resources	No
Utilities and Service Systems	No
Wildfire	No
Mandatory Findings of Significance	No

The California Environmental Quality Act (CEQA) Environmental Checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the project will indicate there are no impacts to a particular resource. A "NO IMPACT" answer in the last column of the checklist reflects this determination. The words "significant" and "significance" used throughout the CEQA Environmental Checklist are only related to potential impacts pursuant to CEQA. The questions in the CEQA Environmental 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, as well as standardized measures applied to all or most Caltrans projects (such as Best Management Practices [BMPs] and measures included in the Standard Plans and Specifications or as Standard Special Provisions [Section 1.6]), are considered to be an integral part of the project and have been considered prior to any significance determinations documented in the checklist or document.

Project Impact Analysis Under CEQA

CEQA broadly defines "project" to include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" (14 California Code of Regulations [CCR] § 15378). Under CEQA, normally the baseline for environmental impact analysis consists of the existing conditions at the time the environmental studies began. However, it is important to choose the baseline that most meaningfully informs decision-makers and the public of the project's possible impacts. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record. The CEQA Guidelines require a "statement of the objectives sought by the proposed project" (14 CCR § 15124(b)).

CEQA requires the identification of each potentially "significant effect on the environment" resulting from the project, and ways to mitigate each significant effect. Significance is defined as "Substantial or potentially substantial adverse change to any of the physical

conditions within the area affected by the project" (14 CCR § 15382). CEQA determinations are made prior to and separate from the development of mitigation measures for the project.

The legal standard for determining the significance of impacts is whether a "fair argument" can be made that a "substantial adverse change in physical conditions" would occur. The fair argument must be backed by substantial evidence including facts, reasonable assumption predicated upon fact, or expert opinion supported by facts. Generally, an environmental professional with specific training in an area of environmental review can make this determination.

Though not required, CEQA suggests Lead Agencies adopt thresholds of significance, which define the level of effect above which the Lead Agency will consider impacts to be significant, and below which it will consider impacts to be less than significant. Given the size of California and it's varied, diverse, and complex ecosystems, as a Lead Agency that encompasses the entire State, developing thresholds of significance on a state-wide basis has not been pursued by Caltrans. Rather, to ensure each resource is evaluated objectively, Caltrans analyzes potential resource impacts in the project area based on their location and the effect of the potential impact on the resource as a whole. For example, if a project has the potential to impact 0.10 acre of wetland in a watershed that has minimal development and contains thousands of acres of wetland, then a "less than significant" determination would be considered appropriate. In comparison, if 0.10 acre of wetland would be impacted that is located within a park in a city that only has 1.00 acre of total wetland, then the 0.10 acre of wetland impact could be considered "significant."

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the lead agency may adopt a negative declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)). A proposed negative declaration must be circulated for public review, along with a document known as an Initial Study. CEQA allows for a "Mitigated Negative Declaration" in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5).

Although the formulation of mitigation measures shall not be deferred until some future time, the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review.

The lead agency must (1) commit itself to the mitigation, (2) adopt specific performance standards the mitigation will achieve, and (3) identify the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure. Compliance with a regulatory permit or other similar processes may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards (§ 15126.4(a)(1)(B)).

Per CEQA, measures may also be adopted, but are not required, for environmental impacts that are not found to be significant (14 CCR § 15126.4(a)(3)). Under CEQA, mitigation is defined as avoiding, minimizing, rectifying, reducing, and compensating for any potential impacts (CEQA 15370). Regulatory agencies may require additional measures beyond those required for compliance with CEQA. Though not considered "mitigation" under CEQA, these measures are often referred to in an Initial Study as "mitigation", Good Stewardship or Best Management Practices. These measures can also be identified after the Initial Study/Negative Declaration is approved.

CEQA documents must consider direct and indirect impacts of a project (California Public Resources Code [PRC] § 21065.3). They are to focus on significant impacts (14 CCR § 15126.2(a)). Impacts that are less than significant need only be briefly described (14 CCR § 15128). All potentially significant effects must be addressed.

No-Build Alternative

For each of the following CEQA Environmental Checklist questions, the "No-Build" alternative has been determined to have "No Impact". Under the "No-Build" alternative, no alterations to the existing conditions would occur and no proposed improvements would be implemented. The "No-Build" alternative will not be discussed further in this document.

Definitions of Project Parameters

When determining the parameters of a project for potential impacts, the following definitions are provided:

Project Area: This is the general area where the project is located. This term is mainly used in the Environmental Setting section (e.g., watershed, climate type, etc.).

Project Limits: This is the beginning and ending post miles for a project. This is different than the ESL in that it sets the beginning and ending limits of a project along the highway. It is the limits programmed for a project, and every report, memo, etc. associated with a project should use the same post mile limits. In some cases, there may be areas associated with a project that are outside of the project limits, such as staging and disposal locations.

Project Footprint: The area within the Environmental Study Limits (ESL) the project is anticipated to impact, both temporarily and permanently. This includes staging and disposal areas.

Environmental Study Limits (ESL): The project engineer provides the Environmental team the ESL as an anticipated boundary for potential impacts. The ESL is *not* the project footprint. Rather, it is the area encompassing the project footprint where there could *potentially* be direct and indirect disturbance by construction activity. The ESL is larger than the project footprint in order to accommodate any future scope changes. The ESL is also used for identifying the various Biological Study Areas (BSAs) needed for different biological resources.

Biological Study Area (BSA): The BSA encompasses the ESL plus any areas outside of the ESL that could potentially affected by a project (e.g., noise, visual, Coastal Zone, etc.). Depending on resources in the area, a project could have multiple BSAs. Each BSA should be identified and defined. If the project is within the Coastal Zone, this area would also include the required 100-feet buffer. The Biological Study Area for the Willow Slough Bridge Replacement Project is the same as the Environmental Study Limits as no additional buffers for sensitive species were required.

2.1 Aesthetics

Except as provided in the Public Resources Code Section 21099:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Have a substantial adverse effect on a scenic vista?				✓
Would the project: b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
Would the project: 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?				✓
Would the project: d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Visual Impact Assessment (*VIA) dated May 16, 2023 (Caltrans 2023h). Potential impacts to scenic resources are not anticipated due to negligible visual changes to the environment.

2.2 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; the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: 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?				✓
Would the project: b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
Would the project: c) Conflict with existing zoning for, or cause rezoning of forest land (as defined by 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))?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
Would the project: 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?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the California Department of Conservation Farmland Maps and Natural Resources Conservation Service (NRCS) Soil Survey report (NRCS 2023). The project would require a Temporary Construction Easement to the property west of the project (see Section 1.3); however, no land use conversion to non-agricultural use, or any other use, would be required. The project would not require use of the property east of the project, which is encumbered by an active Williamson Act contract. There are no timberland areas within the project limits or adjacent to it.

2.3 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
Would the project: 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?				✓
Would the project: c) Expose sensitive receptors to substantial pollutant concentrations?				✓
Would the project: d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Air Quality, Traffic Noise, and GHG Memo* dated March 20, 2023 (Caltrans 2023f). The project is consistent with the SACOG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) air quality conformity. The project does not result in an increase in criteria pollutant, exposure to pollutants or result in adverse emissions.

2.4 Biological Resources

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?			✓	
Would the project: 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?			✓	
Would the project: 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?			✓	
Would the project: 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?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
Would the project: 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?				✓

The "No Impact" determinations for Questions (d),(e), (f), and "Less Than Significant Impact" determinations for Questions (a), (b), and (c) in this section are based on the scope, description, and location of the proposed project, as well as the Natural Environment Study dated December 2023 (Caltrans 2023c).

Regulatory Setting

Within this section of the document (2.4 Biological Resources), the topics are separated into Sensitive Natural Communities, Wetlands and Other Waters, Plant Species, Animal Species, Threatened and Endangered Species, and Invasive Species. Plant and animal species listed as "threatened" or "endangered" are covered within the Threatened and Endangered Species sections. Other special status plant and animal species, including United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) candidate species, California Department of Fish and Wildlife (CDFW) Fully Protected (FP) species, Species of Special Concern (SSC), and California Native Plant Society (CNPS) rare plants are covered in the respective Plant and Animal sections.

Sensitive Natural Communities

CDFW maintains a list of sensitive natural communities (SNCs). SNCs are those natural communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status taxa or their habitat.

Wetlands and Other Waters

Waters of the United States (including wetlands) and State are protected under several laws and regulations. The primary laws and regulations governing wetlands and other waters include:

- Federal: Clean Water Act (CWA)–33 United States Code (USC) 1344
- Federal: Executive Order for the Protection of Wetlands (Executive Order [EO] 11990)
- State: California Fish and Game Code (CFGC) Sections 1600–1607
- State: Porter-Cologne Water Quality Control Act Section 3000 et seq.

Plant Species

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special status plant species. The primary laws governing plant species include:

- Federal Endangered Species Act (FESA)–USC 16 Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402
- California Endangered Species Act (CESA)–California Fish and Game Code Section 2050, et seq.
- Native Plant Protection Act–California Fish and Game Code Sections 1900–1913
- National Environmental Policy Act (NEPA)–40 CFR Sections 1500 through 1508
- California Environmental Quality Act (CEQA)–California Public Resources Code (PRC) Sections 21000–21177

Animal Species

The USFWS, NMFS, and CDFW have regulatory responsibility for the protection of special status animal species. The primary laws governing animal species include:

- NEPA–40 CFR Sections 1500 through 1508
- CEQA–California Public Resources Code Sections 21000–21177
- Migratory Bird Treaty Act–16 USC Sections 703–712

- Fish and Wildlife Coordination Act–16 USC Section 661
- California Fish and Game Code–Sections 1600–1603
- California Fish and Game Code–Sections 4150 and 4152

Threatened and Endangered Species

The primary laws governing threatened and endangered species include:

- FESA–USC 16 Section 1531, et seq. See also 50 CFR Part 402
- CESA–California Fish and Game Code Section 2050, et seq.
- CESA–California Fish and Game Code Section 2080
- CEQA, California Public Resources Code, Sections 21000–21177
- Magnuson-Stevens Fishery Conservation and Management Act, 16 USC Section 1801

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected, and preserved.

CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of these threatened or endangered species if reasonable and prudent alternatives are available.

The California Department of Fish and Wildlife (CDFW) regulates activities related to fish, wildlife, and plants in California and is responsible for administering the California Endangered Species Act (CESA). CESA emphasizes early coordination to avoid potential affects to state listed species and to develop appropriate mitigation planning to offset loss of listed species.

Invasive Species

The primary laws governing invasive species are Executive Order (EO) 13112 and NEPA. EO 13112, signed February 3, 1999, directs all federal agencies to prevent and control the introduction of invasive species in a cost-effective and environmentally sound manner. The EO established the National Invasive Species Council (NISC), which comprises federal agencies and departments and a supporting Invasive Species Advisory Committee (ISAC) which includes state, local, and private entities. In 2016, NISC released an updated national Invasive Species Management Plan (National Invasive Species Council 2016-2018) that recommends objectives and measures to implement the EO and to prevent the introduction and spread of invasive species. The EO requires consideration of invasive species in NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Affected Environment

A Natural Environment Study (NES) (Caltrans 2023c) was prepared for the project. Caltrans coordinated with fisheries biologists and water quality specialists, as well as agency personnel from USFWS, NMFS, USACE, CDFW, and Central Valley Regional Water Quality Control Board (CVRWQCB). See Chapter 3 for a summary of these coordination efforts and professional contacts.

The proposed project is located on SR 99 between PMs 6.04 and 7.06, approximately 6 miles north of the Sacramento and San Joaquin county line and within the Galt U.S. Geological Survey 7.5-minute quadrangle. The 27.81-acre Biological Study Area (BSA) is located within the Sacramento Valley. The climate is characterized as Mediterranean, with hot, dry summers and cool, wet winters.

The topography within the BSA is mostly flat. The BSA elevation ranges from approximately 30 feet to 40 feet. Land uses within the BSA and the surrounding area are primarily agricultural. The project is adjacent to the Cosumnes River Preserve.

The BSA supports land cover types that can be categorized as non-wetland vegetation communities (annual grassland, ruderal, and agriculture), wetland plant communities (freshwater marsh), and non-wetland drainage communities (ephemeral drainage and ditch). The majority of the BSA consists of annual grassland with wetlands.

Sensitive Natural Communities

Natural communities of special concern are habitats considered sensitive because of their high species of diversity, high productivity, unusual nature, limited distribution, or declining status. Local, state, and federal agencies consider these habitats important, and compensation for loss of sensitive communities is generally required by agencies. The CNDDB contains a current list of rare natural communities throughout the state. The USFWS considers certain habitats, such as riparian communities, important to wildlife; and the USACE and EPA consider stream habitats important for water quality and wildlife. Waters of the United States and Waters of the State are regulated by USACE and the Regional Water Boards, respectively. Research on sensitive species that could potentially occur within the BSA was conducted using the CDFW–CNDDB, California Native Plant Society (CNPS), and the USFWS official species lists. Based on the search results, 4 plant species and 13 animal species considered sensitive by the CDFW, CNPS and USFWS were identified as occurring within 5 miles of the BSA.

Wetlands and Other Waters

Under Section 404 of the Clean Water Act, Waters of the U.S. (WOTUS) include the following: territorial seas, coastal and inland waters, lakes, rivers, and streams that are navigable and their adjacent wetlands, tributaries to navigable waters and their adjacent wetlands, interstate waters and their tributaries including adjacent wetlands, and all Other Waters of the U.S. (intermittent and ephemeral streams). According to the State Water Resources Control Board, Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state. Aquatic resources regulated by California Fish and Game Code Section 1600 et seq. include areas of bed, bank, and channel of watercourses, in addition to the lateral extent of riparian vegetation associated with habitat and hydrology.

The USACE and U.S. Environmental Protection Agency (U.S. EPA) jointly define wetlands as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The BSA contains a freshwater emergent wetland that would typically be considered a Waters of the United States and Waters of the State. A wetland delineation is pending appropriate rainy conditions, and will define the acreage of Waters present within the BSA. The proposed project would result in placement of fill in these waterbodies. Accordingly,

Caltrans would comply with the Clean Water Act by obtaining a 404 Permit from the USACE–Sacramento District, and by obtaining a 401 Water Quality Certification from the CVRWQCB before discharging fill into, or excavating within, federally and state-regulated waters and wetlands.

Plant Species

The plant species are of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special status plants occurring on site. Based on the queries made to USFWS, NMFS, CNDDB (CDFW) databases, and the CNPS rare plant inventory, 4 special status plants were identified as potentially occurring within the Biological Study Area (BSA). Those species were either not observed, the species exists outside of the elevation and/or geographical range of the BSA, or there is no suitable habitat within the study area or related BSA. No special status plant species were found to be present within the Environmental Study Limits (ESL).

Animal Species

Animals are of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions: and/or (3) the habitat requirements of special status animals occurring on site. Bat calls were observed coming from inside the southbound bridge and guano was observed underneath the southbound lane bridge. No bats were observed utilizing the abutment joints. The California Fish and Game Code (Section 4150) prohibits take of bats.

Native birds protected under the Migratory Bird Treaty Act (MBTA), and similar provisions under the California Fish and Game Code, currently nest or have the potential to nest within the BSA. During biological surveys, habitat was determined to be favorable to canopy, cavity, and structural nesting birds. Evidence of swallows (*Hirundo rustica*) nesting was present under the bridge structures within the BSA at Willow Slough.

There is also potential habitat for Giant garter snake (GGS) within the ESL and habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp adjacent to the ESL.

Threatened and Endangered Species

The following special status wildlife species could potentially occur within the BSA and be affected by the proposed project:

- Giant garter snake (*Thamnophis gigas*)–Federal and State Threatened
- Vernal pool fairy shrimp (*Branchinecta lynchi*)–Federal Threatened
- Vernal pool tadpole shrimp (*Lepidurus packardi*)–Federal Endangered

In addition to the permanent and temporary losses of habitat, the proposed project could result in the disturbance, injury, and mortality of special status wildlife listed above. No impacts on special status fish would occur because no habitat exists within the project area. Fleshy Owl's-clover *(Castilleja campestris* ssp. *succulenta*), a federally threatened species, was not identified within the BSA; therefore, is presumed absent. There would be no impact to Fleshy Owl's-clover.

Invasive Species

The proposed project would create additional temporary disturbed areas within the ESL during construction due to staging of materials and equipment and access to the construction area. Areas where temporary disturbance occurs would be more susceptible to colonization or spread by invasive plants. Introduction and spread of invasive plants would be minimized through the implementation of project Standard Measures and Best Management Practices (BMPs).

Environmental Consequences

This section evaluates potential effects of project construction activities on sensitive biological resources within the BSA.

Sensitive Natural Communities

Habitats are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special status plants or animals occurring on-site. The BSA supports a freshwater emergent wetland, a natural community of special concern. The discussion of impacts to wetlands is presented in the Wetlands and Other Waters section below.

Wetlands and Other Waters

A freshwater emergent wetland occurs within the BSA under the median, which is where the new bridge is proposed to be built. The wetland also runs along the west side of the highway and is entirely encompassed by the temporary construction easement (TCE) area needed for proposed staging and access. At the time of completion of the NES, a wetland delineation had not yet been conducted as permission for access had not yet been received. However, a wetland delineation for water resources within the BSA will be conducted during the project 1-Phase, including on property outside the ROW, which contains the majority of wetlands within the BSA. Pending this wetland delineation, all work planned within TCE areas and bridge replacement areas are assumed to reside below the OHWM of the wetland.

The freshwater emergent wetland may be considered jurisdictional Waters of the United States and Waters of the State, pending the wetland delineation. The proposed project would result in placement of fill in these waterbodies. The freshwater emergent wetland in the median would be permanently impacted by 0.16 acres of earthen fill necessary for bridge support. The freshwater emergent wetland to the west of the highway would be temporarily impacted due to staging and access activities, in the amount of 1.66 acres. Therefore, Caltrans will comply with the Clean Water Act by obtaining a 404 Permit from the USACE–Sacramento District, and by obtaining a 401 Water Quality Certification from the CVRWQCB before discharging fill into, or excavating within, federally and state-regulated waters and wetlands.

Onsite restoration of Waters of the U.S. and State would be implemented to the greatest extent possible. However, some permanent impacts would be unavoidable due to the installation of the new southbound lane bridge. To compensate for 0.16 acres of permanent impacts to wetlands, Caltrans proposes to participate in the National Fish and Wildlife Foundation's Sacramento District California In-Lieu Fee Program.

Vegetation surrounding the wetlands is sparse, and no riparian vegetation was observed within either area of permanent or temporary impacts. No impacts to riparian vegetation are anticipated.

Plant Species

There were no special status plant species observed within the BSA during the 2023 survey season. The project is not anticipated to have any impacts to special status plant species.

Animal Species

Bats were observed inhabiting the southbound bridge. Due to demolition of the southbound lane bridge the project may result in impacts to bats. However, the use of an exclusion device would prevent any impacts to bats.

Favorable bird nesting habitat would be affected by the demolition and reconstruction of the southbound bridge. Trees and vegetation would be removed throughout construction activities. Bridge work would occur throughout project activities. If these activities occur during the nesting season, active nests may be impacted, and the project could result in the disturbance, injury, or mortality of migratory birds.

Potential habitat for Giant garter snake (GGS) occurs within the ESL and habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp exists adjacent to the ESL. Impacts to these species are discussed in the Threatened and Endangered Species section below.

No impacts on special status fish would occur because no habitat exists within the project area.

Threatened and Endangered Species

Giant Garter Snake

The giant garter snake (GGS) (*Thamnophis gigas*) is a federal and state threatened species. No GGS were observed within the BSA. Sparse aquatic vegetation reduces GGS' ability to hide within potential habitat. Drainage is ephemeral, which would make it difficult for GGS to inhabit Willow Slough in dry periods. Banks of the slough are 2:1 slopes and largely rocky material which could impede GGS' ability to emerge. The slough west of the highway, north of the bridge, was also dry with no embankment, which could also inhibit GGS' ability to inhabit the potential habitat. Willow Slough is only seasonally inundated and is dry most of the year. Therefore, no potentially suitable GGS habitat exists within the BSA. No critical habitat exists within the BSA.

If GGS is present in the action area during construction, take of the species could occur. Additionally, GGS and nests containing hatchlings could be crushed and killed during the movement of construction equipment in upland habitats. However, as mentioned previously, the project location is found in an area unlikely to be inhabited by GGS due to low quality of potential habitat; therefore, the potential for direct injury or mortality is not likely.

Per FESA, Caltrans has determined this project ***may affect, is not likely to adversely affect*** GGS. Due to absence of critical habitat, no effects to critical habitat are anticipated.

Per CESA, Caltrans has determined there would be ***no "take"*** of giant garter snake.

Vernal Pool Fairy Shrimp

Vernal pool fairy shrimp (*Branchinecta lynchi*) is a federally listed threatened species. While no vernal pools were observed within the BSA, a freshwater emergent wetland does occur within the BSA which connects to a vernal pool complex east of the BSA, outside the work area. No work is planned within vernal pools. Vernal pools receive irrigation runoff as their principal water source and hold water for shorter periods of time and are often seasonally inundated during short periods throughout the year. This hydroperiod would not support suitable conditions for vernal pool fairy shrimp reproduction. Vernal pool fairy shrimp has documented occurrences within 1 mile of the project action area (CDFW 2023; Caltrans 2023c (NES Chapter 6)).

Because the project consists of modifying an existing roadway with established drainage patterns for stormwater runoff, the project will not indirectly affect hydrology within adjacent habitat since the existing drainage patterns will be maintained. Indirect effects associated with potential sediment and chemical runoff during construction would also be avoided through implementation of Caltrans Standard Measures and construction BMPs that include installation of sediment control devices and implementation of a spill response plan.

Per FESA, Caltrans has determined this project ***may affect, is not likely to adversely affect*** vernal pool fairy shrimp.

Vernal Pool Tadpole Shrimp

Vernal pool tadpole shrimp (*Lepidurus packardi*) is a federally listed endangered species and is one of three most commonly found large branchiopods occurring in the Central Valley. No vernal pools were observed within the BSA. However, a freshwater emergent wetland occurs within the BSA which connects to a vernal pool complex east of the BSA, outside the work area. No work is planned within vernal pools. This wetland receives irrigation runoff as their principal water source and holds water for shorter periods of time than vernal pools and are often seasonally inundated for short periods throughout the year. This hydroperiod would not support suitable conditions for vernal pool fairy shrimp reproduction. Vernal pool tadpole shrimp have documented occurrences within 1 mile of project action area (CDFW 2023; Caltrans 2023c (NES Chapter 6)).

Because the project consists of modifying an existing roadway with established drainage patterns for stormwater runoff, it is presumed that if these drainage patterns are maintained the project will not indirectly affect hydrology within adjacent habitat. Indirect effects associated with potential sediment and chemical runoff during construction would also be avoided and minimized through implementation of Caltrans Standard Measures and construction BMPs that include installation of sediment control devices and implementation of a spill response plan.

Per FESA, Caltrans has determined this project ***may affect, is not likely to adversely affect*** vernal pool tadpole shrimp.

Invasive Species

The proposed project would create additional temporary disturbed areas within the ESL during construction due to staging of materials and equipment and access to the construction area. Areas where temporary disturbance occurs would be more susceptible to colonization spread by invasive plants. Introduction and spread of invasive plants would be minimized through the implementation of Caltrans Standard Measures and BMPs.

Avoidance, Minimization and Mitigation Measures

Implementation of Caltrans Standard Measures and Best Management Practices would avoid and minimize impacts from the proposed project.

Sensitive Natural Communities /Wetlands and Other Waters

Caltrans would implement appropriate Caltrans Standard Measures and BMPs to minimize adverse effects to water quality, aquatic habitat, and aquatic species. The project has been designed to minimize temporary and permanent impacts to Willow Slough. Project avoidance and minimization measures, as well as BMPs, have been incorporated into the design to minimize effects of construction activities on the channel. The project would comply with the following avoidance and minimization measures:

- Prior to initiating construction, an ESA fence would be installed along the construction limits to prevent encroachment into sensitive areas adjacent to the construction site that are not targeted for clearing.

- Construction would be limited to the smallest practical footprint to minimize temporary, indirect, and any permanent impacts to jurisdictional wetlands and Waters of the United States confirmed with the wetland delineation.
- Work in the wetland would likely be limited to the driest/low flow season (approximate dates of May 1–October 15) pursuant to environmental permits.

Plant Species

There were no special status plant species observed within the BSA during the 2023 survey season. As the project is not anticipated to have any impacts to special status plant species, avoidance, minimization, and mitigation measures are not proposed.

Animal Species

Bats were observed within the ESL, inhabiting the southbound lane bridge. The use of an exclusion device would prevent any impacts to bats.

Favorable bird nesting habitat, including vegetation, bridge cavity, and bridge structural sections, would be affected by the demolition and reconstruction of the southbound bridge. Caltrans Standard Measures and BMPs (Section 1.6) would be implemented to avoid and minimize impacts to migratory birds. The following additional measures will be utilized to ensure protection of migratory nesting birds:

- To ensure compliance with the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code, vegetation removal and initiation of construction activities should not occur during the nesting season (defined as February 1–September 30). If this is not possible and vegetation removal or initiation of work will occur during the nesting season, a pre-construction survey will be required. The pre-construction survey shall be performed by a qualified biologist to determine the presence of nesting birds and ensure active nests are not directly or indirectly impacted during construction. The pre-construction survey area will include the limits of the project impact area plus a 500-foot buffer. If work is planned to begin during the nesting season (February 1–September 30), all vegetation removal shall be completed within 5 days of the nesting survey where the survey determines no active nests are present. If the nest of a protected bird is found, the perimeter shall be flagged, and a qualified biologist will coordinate with USFWS and CDFW to determine an appropriate buffer distance from construction to ensure protection of the nest. The contractor shall stop work in the nesting area and is prohibited from conducting work that could disturb the

nesting birds until the buffer is established. The nest shall remain in the protected area until the biologist has determined that nesting activities are complete.

- Construction activities shall not disturb nesting swallows. A qualified biologist shall coordinate with CDFW and USFWS to determine what construction activities, if any, can occur once nesting activities commence.
- A Bird Exclusion Plan would be prepared by a qualified biologist and implemented prior to construction. Exclusion devices would be designed so they would not trap or entangle birds or bats. Exclusion devices would be installed outside of the breeding season (October 1 through January 31) to eliminate the re-occupancy of existing structures by migratory bird species that may attempt to nest on the structure during construction. On structures or parts of structures where it is not feasible to install bird exclusion devices, partially constructed and unoccupied nests within the construction area would be removed and disposed of on a regular basis throughout the breeding season (February 1 through September 30 with biologist discretion) to prevent their occupation. Nest removal would be repeated weekly under guidance of a qualified biologist to ensure nests are inactive prior to removal.

Threatened and Endangered Species

Giant Garter Snake

In addition to implementing Caltrans' Standard Measures and BMPs throughout the proposed project for the duration of construction, including erosion and sediment control, Caltrans has proposed the following measures to minimize effects to GGS. The following site restrictions be implemented to avoid or minimize effects on listed species and their habitats:

- Routes and boundaries of road work will be clearly marked before initiation of construction or grading.
- Hazardous materials, such as fuels, oils, and solvents, will be stored in sealable containers in a designated location that is at least 100 feet from wetlands and aquatic habitats.
- Before construction activities begin, the contractor, in consultation with a USFWS and CDFW qualified biologist, and in accordance with the project plans, will clearly demarcate environmentally sensitive areas, if any, adjacent to the project footprint. Temporary exclusion fencing will be installed along the perimeter of all Environmentally Sensitive Areas that are to be avoided so as not to be disturbed by construction activities. They will remain in place throughout the duration of

construction and will be fully maintained and inspected daily when project activities are underway. Repairs to the fencing will be made within 24 hours of identifying the need for repair. Upon completion of construction, the fencing will be completely removed.

- All construction equipment will be restricted to operating within the designated work areas, staging areas, and access routes. The limits of designated work areas and staging areas (i.e., project footprint) will be clearly marked before beginning construction.
- Construction activity will be conducted between May 1 and October 1, which is the active season for GGS, in order to minimize impacts to the species. Snake exclusion fencing will be placed around the action area (fenced area) before construction during the active period for GGS (May 1–October 1) and be maintained throughout the construction period until completion of the project.
- On-site monitoring during ground disturbance activities of the project will be conducted by a USFWS/CDFW-approved biologist. If GGS is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined that the GGS will not be harmed. Any sightings and any incidental take will be reported to the USFWS and CDFW immediately by telephone at (916) 414-6600 or (916) 358-2900, respectively, and e-mail or written letter addressed to the Chief, Sacramento Division (USFWS) or North Central Region (CDFW), within one working day of the incident.
- A Worker Environmental Awareness Training Program for construction personnel will be conducted by USFWS/CDFW-approved biologist for all construction workers including contractors, prior to the start of construction activities. This training instructs workers to recognize GGS and their habitats.
- Twenty-four hours prior to construction activities, the project area will be surveyed for GGS by a USFWS/CDFW-approved biologist. Surveys of the project area should be repeated if a two-week or greater lapse in construction activity occurs.
- The canals and rice fields adjacent to the project area will be flagged and designated an Environmentally Sensitive Area during the construction period.
- Upon completion of the project, all disturbed areas within the action area will be revegetated using native plant species, and post-monitoring work and photographs will be reported to USFWS and CDFW showing that temporary impacts have been restored to pre-construction conditions.

- At the end of each work day, Caltrans shall place an escape ramp at each end of the open trench. This will allow any animals that may have been entrapped in the trench overnight to climb out. The escape ramp may be constructed of dirt fill, wood planking, or other suitable material and placed at an angle no greater than 30 degrees.

Vernal Pool Fairy Shrimp

Implementation of the following measures would ensure the proposed project minimizes effects on vernal pool fairy shrimp within and adjacent to the construction area. Additional avoidance and minimization measures may be agreed upon during Section 7 consultation.

- ***Measure 1: Install Fencing and/or Flagging to Protect Sensitive Biological Resources***
    - Prior to construction, high-visibility orange construction fencing or flagging, as depicted on final project layouts, will be installed along the perimeter of the work area adjacent to vernal pools. Temporary ESA fencing will be maintained throughout the duration of the construction period. If the fencing is removed, damaged, or otherwise compromised during the construction period, construction activities will cease until the fencing is repaired or replaced. The project's special provisions package will provide clear language regarding acceptable fencing material, installation, and maintenance requirements. All temporary fencing will be removed upon completion of construction.

- ***Measure 2: Conduct Mandatory Environmental Awareness Training for Construction Personnel***
    - Before any work occurs within the project limits, including grading and vegetation removal (grubbing), mandatory Contractor/Worker Environmental Awareness Training will be held for construction personnel. The Awareness Training will be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid impacts to sensitive biological resources (e.g., wetlands, special status species, and nesting birds) adjacent to construction areas and the penalties for not complying with applicable state and federal laws and permit requirements. The biologist will inform all construction personnel about the life history and habitat requirements of special status species with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of applicable project permits. Proof of this instruction will be submitted to Caltrans and other overseeing agencies (i.e., CDFW, USFWS), as appropriate.

The Environmental Awareness Training will also cover general restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on sensitive biological resources during project construction. General restrictions and guidelines that must be followed by construction personnel are listed below.

- Project-related vehicles will observe the posted speed limit on hard-surfaced roads and a 10 mile-per-hour speed limit on unpaved roads or access areas during travel within the project limits.
- Project-related vehicles and construction equipment will restrict off-road travel to the designated construction area.
- Vegetation clearing and construction operations will be limited to the minimum necessary in areas of temporary access to work areas and staging.
- All food-related trash will be disposed of in closed containers and removed from the project site at least once a week during the construction period. Construction personnel will not feed or otherwise attract wildlife to the project site.
- To prevent possible resource damage from hazardous materials (such as motor oil or gasoline), construction personnel will not service vehicles or construction equipment outside designated staging areas.

- ***Measure 3: Retain a Qualified Biologist to Conduct Periodic Monitoring During Construction in Sensitive Habitats***
  - The contractor will retain a qualified biologist to monitor all construction activities that involve ground disturbance (e.g., vegetation removal, grading, excavation) or adjacent to ESAs (e.g., wetlands, streams, special status species habitat, and active bird nests). At minimum, the monitor will conduct weekly site visits and will monitor construction activities in the vicinity of sensitive habitat for a minimum of 2 hours. The purpose of the monitoring is to ensure that measures identified in this report are properly implemented to avoid and minimize effects on sensitive biological resources and to ensure the project complies with all applicable permit requirements and agency conditions of approval. The biologist will ensure that fencing around ESAs remains in place during

construction and that no construction personnel, equipment, or runoff of sediment from the construction area enters ESAs. The monitor will complete daily logs, and a final monitoring report will be prepared at the end of each construction season to be submitted to Caltrans and other overseeing agencies (i.e., CDFW, USFWS), as appropriate.

- ***Measure 4: Avoid and Minimize Potential Indirect Impacts on Habitat for Vernal Pool Branchiopods and Other Vernal Pool Species***
    - The following avoidance and minimization efforts will be implemented prior to and during construction adjacent to protect habitat for vernal pool fairy shrimp, vernal pool tadpole shrimp, and other vernal pool species outside the project footprint.
        - Ground disturbance within 250 feet of suitable vernal pool fairy shrimp and vernal pool tadpole shrimp habitat (i.e., vernal pools) will be avoided from the first day of the first significant rain (1 inch or greater) until June 1, or until suitable wetlands remain dry for 72 hours and no significant rain is forecast on the day of such ground disturbance.
        - Consistent with Measure 1 (*Install Fencing and/or Flagging to Protect Sensitive Biological Resources),* a qualified biologist will guide the installation of exclusion fencing prior to the start of ground-disturbing activities (including staging, grading, and vegetation removal). The exclusion fencing will be installed along the edge of the construction limits between the work area and aquatic resources to be avoided. The exclusion fencing will consist of orange construction barrier and erosion control fencing or combination fencing and will be installed by the construction contractor. The erosion control fencing will be buried a minimum of 6 inches to prevent sediment runoff into adjacent wetlands.
        - No herbicide will be applied within 100 feet of aquatic habitat, except when applied to cut stumps or frilled stems, or injected into stems. No broadcast applications will be used.

Vernal Pool Tadpole Shrimp

For measures that apply to vernal pool tadpole shrimp, please refer to the avoidance and minimization measures for vernal pool fairy shrimp.

Invasive Species

The proposed project would create additional temporary disturbed areas within the ESL. Introduction and spread of invasive plants would be minimized through the avoidance and minimization measures listed in Section 1.6 and through the implementation of Caltrans Standard Measures and BMPs.

Discussion of CEQA Environmental Checklist Question 2.4(a)—Biological Resources

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries/NMFS?

Less Than Significant Impact. Caltrans has determined the project would have a *Less Than Significant Impact* on species identified as candidate, sensitive or special status species based on the following:

Plant Species

There were no special status plant species observed within the BSA during the 2023 survey season. The project is not anticipated to have any impacts to special status plant species.

Animal Species

With the implementation of a bat exclusionary device to prevent bats from using the bridge, no impacts are expected to occur.

With the implementation of Caltrans Standard Measures and BMPs (Section 1.6) and avoidance and minimization measures listed above in Section 2.4, impacts to migratory birds will be avoided or minimized.

No impacts on special status fish would occur because no habitat exists within the project area.

Threatened and Endangered Species

Giant Garter Snake

The proposed project is not expected to have an adverse effect on GGS. Avoidance measures will be implemented during project construction to avoid and minimize any impacts to GGS, as discussed in Section 2.4 above.

Vernal Pool Fairy Shrimp

The proposed project is not expected to have an adverse effect on vernal pool fairy shrimp. Avoidance measures will be implemented during project construction to avoid and minimize any impacts, as discussed in Section 2.4 above.

Vernal Pool Tadpole Shrimp

The proposed project is not expected to have an adverse effect on vernal pool tadpole shrimp. Avoidance measures will be implemented during project construction to avoid and minimize any impacts, as discussed in Section 2.4 above.

Discussion of CEQA Environmental Checklist Question 2.4(b)—Biological Resources

b) Would the project 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. Caltrans has determined the project would have a *Less Than Significant Impact* on any riparian habitat or other sensitive natural community based on the following:

As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to a sensitive natural community consisting of a freshwater emergent wetland. The proposed project would result in the permanent impact of 0.16 acres of earthen fill necessary for bridge support and the temporary impact of 1.66 acres due to staging and access activities. The minor amount of impacts are not considered significant.

Caltrans will comply with the Clean Water Act by obtaining a 404 Permit from the USACE–Sacramento District, and by obtaining a 401 Water Quality Certification from the CVRWQCB before discharging fill into, or excavating within, federally and state-regulated waters and wetlands.

With the implementation of Caltrans Standard Measures and BMPs, along with the additional avoidance and minimization measures discussed in Section 2.4, less than significant impacts would occur. Onsite restoration would be implemented to the greatest extent possible. However, some permanent impacts would be unavoidable due to the installation of the new southbound lane bridge. To compensate for 0.16 acres of permanent impacts to wetlands, Caltrans proposes to participate in the National Fish and Wildlife Foundation's Sacramento District California In-Lieu Fee Program.

Discussion of CEQA Environmental Checklist Question 2.4(c)—Biological Resources

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, march, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. Caltrans has determined the project would have a *Less Than Significant Impact* on state or federally protected wetlands based on the following:

As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to a freshwater emergent wetland that is assumed to be jurisdictional Waters of the United States and Waters of the State, pending a wetland delineation.

The proposed project would result in the permanent impact of 0.16 acres of earthen fill necessary for bridge support and would have temporary impacts of 1.66 acres due to staging and access activities. The minor amount of impacts are not considered to be significant.

Caltrans will comply with the Clean Water Act by obtaining a 404 Permit from the USACE–Sacramento District, and by obtaining a 401 Water Quality Certification from the CVRWQCB before discharging fill into, or excavating within, federally and state-regulated waters and wetlands.

With the implementation of Caltrans Standard Measures and BMPs, along with the additional avoidance and minimization measures discussed in Section 2.4, less than significant impacts would occur. Onsite restoration would be implemented to the greatest extent possible. However, some permanent impacts would be unavoidable due to the installation of the new southbound lane bridge. To compensate for 0.16 acres of permanent impacts to wetlands, Caltrans proposes to participate in the National Fish and Wildlife Foundation's Sacramento District California In-Lieu Fee Program.

Discussion of CEQA Environmental Checklist Question 2.4(d)—Biological Resources

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. Caltrans has determined the project would have no impact relative to CEQA Environmental Checklist Question 2.4(d) based on the scope, description, and location of the proposed project, as well as the Natural Environment Study dated December 2023 (Caltrans 2023c).

Discussion of CEQA Environmental Checklist Question 2.4(e)—Biological Resources

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. Caltrans has determined the project would have no impact relative to CEQA Environmental Checklist Question 2.4(e) based on the scope, description, and location of the proposed project, as well as the Natural Environment Study dated December 2023 (Caltrans 2023c).

Discussion of CEQA Environmental Checklist Question 2.4(f)—Biological Resources

f) Would the project 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. Caltrans has determined the project would have no impact relative to CEQA Environmental Checklist Question 2.4(f) based on the scope, description, and location of the proposed project, as well as the Natural Environment Study dated December 2023 (Caltrans 2023c).

2.5 Cultural Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				✓
Would the project: b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				✓
Would the project: c) Disturb any human remains, including those interred outside of dedicated cemeteries?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Historic Property Survey Report* (Caltrans 2023b), *Archaeological Survey Report/Extended Phase I Report* (Caltrans 2023j), and *Historical Resource Evaluation Report* (Caltrans 2023k), which determined a negative finding for cultural resources in the project area. Response to disturbed human remains are addressed as part of the Standard Measures and Best Management Practices (Section 1.6), in the event human remains are discovered during construction.

2.6 Energy

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?				✓
Would the project: b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Air Quality, Traffic Noise, and GHG Memo* dated March 30, 2023 (Caltrans 2023f). Implementation of Caltrans Standard Measures and Best Management Practices would avoid unnecessary consumption of energy resources during the construction of the bridge (Section 1.6). The project TMS elements (see Section 1.3) would help inform travelers of congested areas ahead and alternate routes to consider taking to reduce instances of idling vehicles in congestion. The project is consistent with the Sacramento Area Council of Governments (SACOG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and regional energy plans.

2.7 Geology and Soils

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii) Strong seismic ground shaking?				✓
iii) Seismic-related ground failure, including liquefaction?				✓
iv) Landslides?				✓
Would the project: b) Result in substantial soil erosion or the loss of topsoil?				✓
Would the project: c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				✓
Would the project: 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?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: 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?				✓
Would the project: f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *California Geological Surveys maps, U.S. Geological Survey Landside Inventory, Department of Conservation/Caltrans Highway Corridor Landslide Hazard Mapping program, California Geological Survey, and the District Preliminary Geotechnical Report.* The proposed project location is not on a known fault. The new bridge would be built to current seismic standards anticipated to minimize adverse effects from seismic ground shaking. The project location is not in a liquefaction zone and is not in terrain conducive to landslides. The project includes drainage features and standard Best Management Practices for the operation of the highway to avoid soil erosion due to stormwater runoff. The bridge design and foundation are planned with the geologic make-up considered with recommendations to prevent instability. The project is not located on expansive soils.

2.8 Greenhouse Gas Emissions

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
Would the project: b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia, or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to GHG emissions generated from the production and use of fossil fuels.

Human activities generate GHGs consisting primarily of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG. While CO_2 is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO_2.

The impacts of climate change are already being observed in the form of sea level rise, drought, more intense heat, extended and severe fire seasons, and historic flooding from changing storm patterns. Both mitigation and adaptation strategies are necessary to address these impacts. The most important mitigation strategy is to reduce GHG emissions. In the context of climate change (as distinct from CEQA and NEPA), "mitigation" involves actions to reduce GHG emissions or to enhance the "sinks" that store them (such as forests and soils) to lessen adverse impacts. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

FEDERAL

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2022). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values— "the triple bottom line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

The federal government has taken steps to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) as amended by the Energy Independence and Security Act (EISA) of 2007; and Corporate Average Fuel Economy (CAFE) Standards. This act established fuel economy standards for on-road motor vehicles sold in the United States. The U.S. Department of Transportation's National Highway Traffic and Safety Administration (NHTSA) sets and enforces the CAFE standards based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States. The United States Environmental Protection Agency (U.S. EPA) calculates average fuel economy levels for manufacturers, and also sets related GHG emissions standards under the Clean Air Act. Raising CAFE standards leads automakers to create a more fuel-efficient fleet, which improves our nation's energy security, saves consumers money at the pump, and reduces GHG emissions (U.S. DOT 2014).

U.S. EPA published a final rulemaking on December 30, 2021, that raised federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026, increasing in stringency each year. The updated GHG emissions standards will avoid more than 3 billion tons of GHG emissions through 2050. In April 2022, NHTSA announced corresponding new fuel economy standards for model years 2024 through 2026, which will reduce fuel use by more than 200 billion gallons through 2050 compared to the old standards and reduce fuel costs for drivers (U.S. EPA 2022a; NHTSA 2022).

STATE

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (CARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires the CARB 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. The CARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the CARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including the CARB, 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 the CARB to update the *Climate Change Scoping*

Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$) (Caltrans 2022b). (GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent," or CO_2e. The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.] Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA, from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires the CARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

AB 1279, Chapter 337, 2022, *The California Climate Crisis Act*: This bill mandates carbon neutrality by 2045 and establishes an emissions reduction target of 85% below 1990 level as part of that goal. This bill solidifies a goal included in EO B-55-18. It requires the CARB to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and to identify and implement a variety

of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California, as specified.

Environmental Setting

The proposed project is in a rural area, with a primarily agricultural economy. SR 99 extends over 400 miles through California's San Joaquin and Sacramento valleys. The highway links over 11 urbanized communities in 13 counties and provides critical connections between Chico, Yuba City, Sacramento, and Stockton. SR 99 is the main transportation route to and through the area for both passenger and commercial vehicles. SR 99 has high truck volumes with significant increases in truck traffic during peak agricultural seasons. The SACOG MTP/SCS guides transportation and housing development in the project area.

GHG INVENTORIES

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the CARB does so for the state, as required by H&SC Section 39607.4. Cities and other local jurisdictions may also conduct local GHG inventories to inform their GHG reduction or climate action plans.

NATIONAL GHG INVENTORY

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total GHG emissions from all sectors in 2020 were 5,222 million metric tons (MMT), factoring in deductions for carbon sequestration in the land sector. Of these, 79 percent were CO_2, 11 percent were CH_4, and 7 percent were N_2O; the balance consisted of fluorinated gases. Total GHGs in 2020 decreased by 21 percent from 2005 levels and 11 percent from 2019. The change from 2019 resulted primarily from less demand in the transportation sector during the COVID-19 pandemic. The transportation sector was responsible for 27 percent of total U.S. GHG emissions in 2020, more than any other sector (Figure 2.1), and for 36 percent of all CO_2 emissions from fossil fuel combustion. Transportation CO_2 emissions for 2020 decreased 13 percent from 2019 to 2020, but were 7 percent higher than transportation CO_2 emissions in 1990 (Figure 3) (U.S. EPA 2022a).

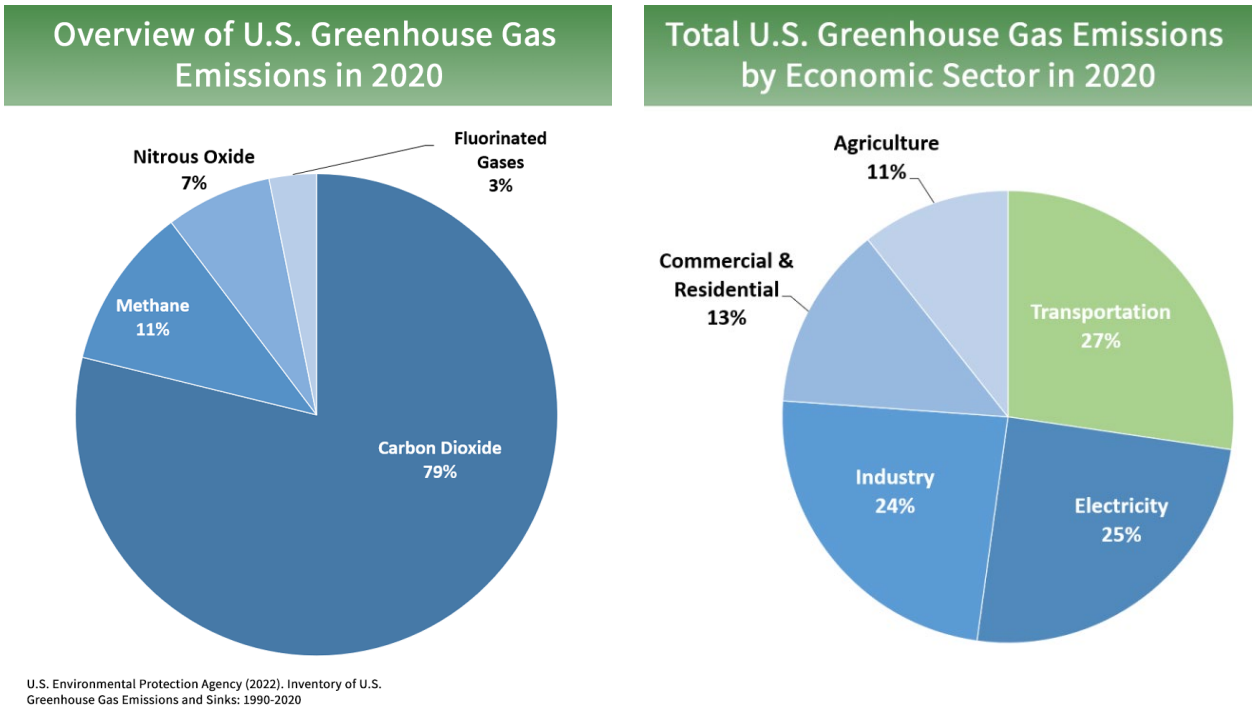

Figure 3. U.S. 2022 Greenhouse Gas Emissions

(Source: U.S. EPA 2022b)

STATE GHG INVENTORY

The CARB 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 2022 edition of the GHG emissions inventory reported emissions trends from 2000 to 2020. Total California GHG emissions in 2020 were 369.2 $MMTCO_2e$, a reduction of 35.3 $MMTCO_2e$ from 2019 and 61.8 $MMTCO_2e$ below the 2020 statewide limit of 431 $MMTCO_2e$. Much of the decrease from 2019 to 2020, however, is likely due to the effects of the COVID-19 pandemic on the transportation sector, during which vehicle miles traveled declined under stay-at-home orders and reductions in goods movement. Nevertheless, transportation remained the largest source of GHG emissions, accounting for 37 percent of statewide emissions (Figure 4).

(Including upstream emissions from oil extraction, petroleum refining, and oil pipelines in California, transportation was responsible for about 47 percent of statewide emissions in 2020; however, those emissions are accounted for in the industrial sector.) California's gross domestic product (GDP) and GHG intensity (GHG emissions per unit of GDP) both declined from 2019 to 2020 (Figure 5). It is expected that total GHG emissions will increase as the economy recovers over the next few years (CARB 2022a).

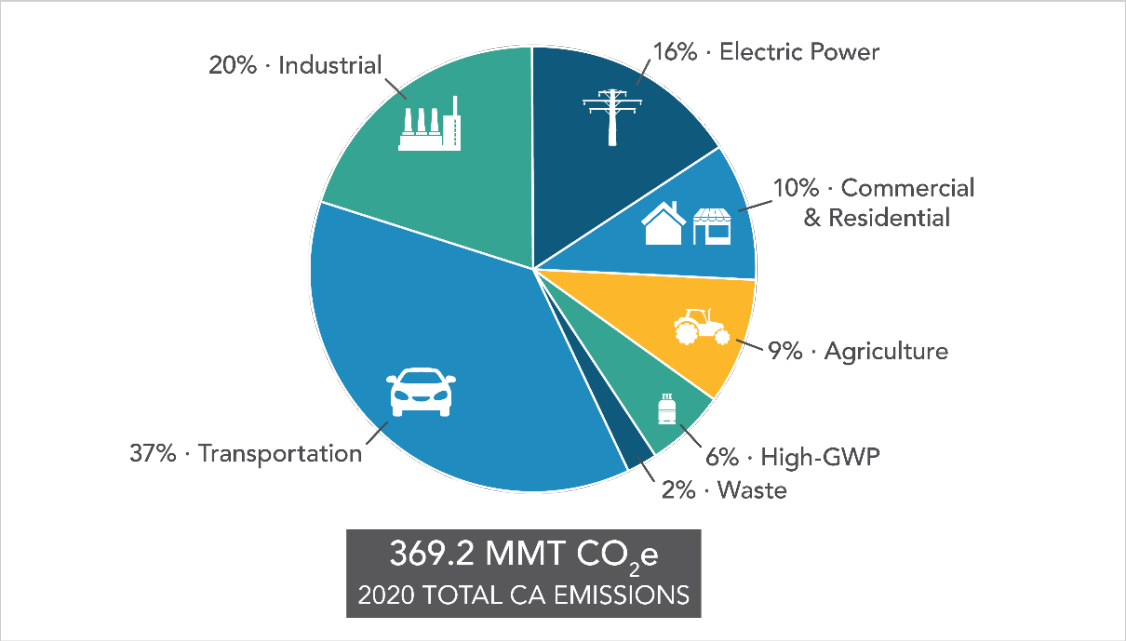

Figure 4. California 2020 Greenhouse Gas Emissions by Scoping Plan Category

(Source: CARB 2022a)

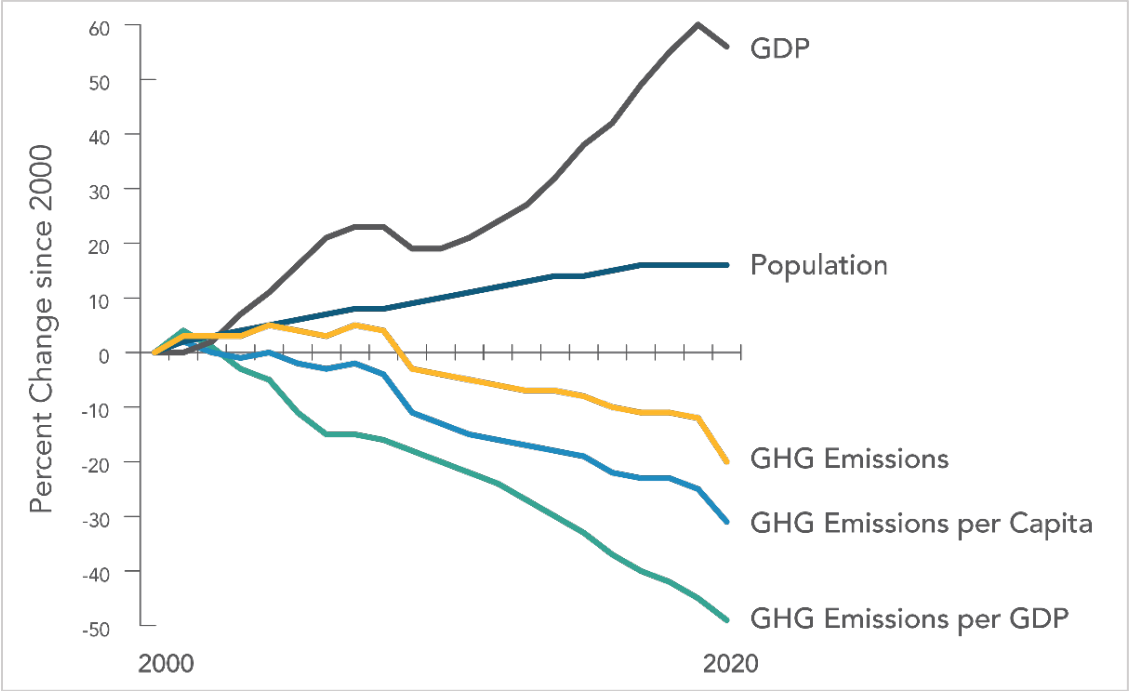

Figure 5. Change in California GDP, Population, and GHG Emissions since 2000

(Source: CARB 2022a)

AB 32 required the CARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. The CARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The draft *2022 Scoping Plan Update* additionally lays out a path to achieving carbon neutrality by 2045 (CARB 2022b).

REGIONAL PLANS

The CARB sets regional GHG reduction targets for California's 18 Metropolitan Planning Organizations (MPOs) to achieve through planning future projects that will cumulatively achieve those goals, and reporting how they will be met in the RTP/SCS. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the SACOG RTP/SCS. The regional reduction target for SACOG is 19 percent by 2035 (CARB 2022c).

Table 3. Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
2035 Sacramento Area Council of Governments (SACOG) Regional Transportation Plan (SACOG 2012)	• Increasing the availability of a variety of land uses and densities that support the attractiveness of active transportation and transit. • Increasing the capacity of existing roadways and interchanges. • Promoting commute alternatives that remove vehicles from the road (e.g., telecommuting, bicycling, transit); and, • Implementing bypasses that move traffic around congested areas and/or new roadways that connect growing residential areas to jobs.
SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for Sacramento, Yolo, Yuba, Sutter, Placer, and El Dorado counties (adopted November 2019)	• Transit oriented development • Complete Streets • Innovative Transportation Demand Management (TDM) programs • Build and maintain a safe resilient and multimodal transportation system • Implement pilot projects aimed at micro transit and micro mobility
Sacramento County Air Pollution Control District Planning & Monitoring Sustainability	• Improve the air quality in the Sacramento County Region by obtaining Ambient Air Quality Standards for public health • Reduce greenhouse gas (GHG) emissions by monitoring facilities and verifying compliance to meet AB 32 goals • Reduce particulate matter and improve outdoor air quality from wood burning appliances • Reduce criteria air pollutants from mobile sources and other non-regulated sources

Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System (SHS) (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH_4 and N_2O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Public Resources Code § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation *v.* San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512). In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

The purpose of the proposed project is to bring the southbound Willow Slough Bridge to current design standards, maintain mainline geometry, provide sufficient shoulder space, and install TMS elements (including a Type III-AF service equipment enclosure, a high-speed weigh-in-motion system controller and cabinet, and closed-circuit television camera on a 90-foot-tall pole) to better capture traffic data and assist with corridor capacity management plans. The project would not increase vehicle capacity and would not increase the number of travel lanes on SR 99; no increase in vehicle miles traveled (VMT) would occur. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions 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.

Use of long-life pavement, improved Transportation Management Plans, and changes in materials can also help offset emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

Construction is expected to begin in 2025 and last approximately 200 working days. The proposed project would result in generation of short-term construction-related GHG emissions. Construction GHG emissions consist of emissions produced because of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays and detours due to construction. These emissions would be generated at different levels throughout the construction phase.

Phases / Emissions	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	NO_x (tons)	ROGs (tons)	CO_2 (tons)
Land Clearing/Grubbing	0.420	0.060	0.271	0.292	0.047	75
Roadway Excavation/Removal	0.598	0.234	2.431	2.548	0.384	571
Structural Excavation/Removal	0.407	0.048	0.079	0.126	0.023	38
Base/Subbase/Imported Borrow	0.590	0.226	2.471	2.379	0.356	525
Structure Concrete	0.045	0.044	0.495	0.702	0.139	177
Paving	0.096	0.094	0.622	1.300	0.180	279
Drainage/Environment/Landscaping	0.079	0.077	0.510	0.967	0.156	203
Phases / Emissions	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	NO_x (tons)	ROGs (tons)	CO_2 (tons)
Traffic Signalization/Signage/Striping/Painting	0.057	0.056	0.879	0.979	0.131	455
Project Total (tons)	2.292	0.839	7.758	9.293	1.416	2,323

Figure 6. Construction Emissions for Roadways

All construction contracts include Caltrans Standard Specifications related to air quality. Sections 7-1.02A and 7 1.02C, Emissions Reduction, require contractors comply with all laws applicable to the project and to certify they are aware of and will comply with all CARB emission reduction regulations. Section 14-9.02, Air Pollution Control, requires contractors comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations (such as equipment idling restrictions) that reduce construction vehicle emissions also help reduce GHG emissions.

CEQA Conclusion

While the proposed project would result in GHG emissions during construction, it is anticipated the project would not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

STATEWIDE EFFORTS

In response to AB 32, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors, to take California into a sustainable, low-carbon and cleaner future, while maintaining a robust economy (CARB 2022d).

Major sectors of the California economy, including transportation, will need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Planning and Research (OPR) identified five sustainability pillars in a 2015 report: (1) increasing the share of renewable energy in the State's energy mix to at least 50 percent by 2030; (2) reducing petroleum use by up to 50 percent by 2030; (3) increasing the energy efficiency of existing buildings by 50 percent by 2030; (4) reducing emissions of short-lived climate pollutants; and (5) stewarding natural resources, including forests, working lands, and wetlands, to ensure they store carbon, are resilient, and enhance other environmental benefits

(California Governor's OPR 2015). OPR later added strategies related to achieving statewide carbon neutrality by 2045 in accordance with EO B-55-18 and AB 1279 (OPR 2022).

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). Reducing today's petroleum use in cars and trucks by 50% is a key state goal for reducing greenhouse gas emissions by 2030 (California Environmental Protection Agency 2015).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency (2022a) released *Natural and Working Lands Climate Smart Strategy*, with a focus on nature-based solutions.

CALTRANS ACTIVITIES

Caltrans continues to be involved on the Governor's Climate Action Team as the CARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

Climate Action Plan For Transportation Infrastructure

The *California Action Plan for Transportation Infrastructure* (CAPTI) builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

California Transportation Plan

The *California Transportation Plan* (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The *CTP 2050* presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021a).

Caltrans Strategic Plan

The *Caltrans 2020–2024 Strategic Plan* includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021b).

Caltrans Policy Directives And Other Initiates

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a Department policy to ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Greenhouse Gas Emissions and Mitigation Report* (Caltrans 2020b) provides a comprehensive overview of Caltrans' emissions. The report documents and evaluates current Caltrans procedures and activities that track and reduce GHG emissions and identifies additional opportunities for further reducing GHG emissions from Department-controlled emission sources, in support of Departmental and State goals.

Project-Level Greenhouse Gas Reduction Strategies

The following measures will also be implemented to reduce greenhouse gas emissions and potential climate change impacts from the project.

- The construction contractor must comply with the 2022 Caltrans Standard Specifications in Section 14-9. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including Sacramento Metropolitan Air Quality Management District regulations and local ordinances.
- Compliance with Title 13 of the California Code of Regulations, which includes idling restrictions of construction vehicles and equipment to no more than 5 minutes.
- Caltrans 2022 Standard Specification 7-1.02C "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board.
- Utilize a Transportation Management Plan to minimize vehicle delays.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Alternative fuels, such as renewable diesel, should be used for construction equipment.
- Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.
- Schedule truck trips outside of peak morning and evening commute hours.

- Reduce construction waste and maximize the use of recycled materials (reduces consumption of raw materials, reduces landfill waste, and encourages cost savings).
- Encourage improved fuel efficiency from construction equipment.
- Maintain equipment in proper tune and working condition.
- Use right size equipment for the job.
- Use equipment with new technologies.
- Apply Construction Environmental Training: Supplement existing training with information regarding methods to reduce GHG emissions related to construction.

Adaptation Strategies

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges, combined with a rising sea level, can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

FEDERAL EFFORTS

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways."

The USDOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (USDOT 2011). The USDOT Climate Action Plan of August 2021 followed up with a statement of policy to "accelerate reductions in greenhouse gas emissions from the transportation sector and make our transportation infrastructure more climate change resilient now and in the future," following this set of guiding principles (USDOT 2021):

- Use best-available science
- Prioritize the most vulnerable
- Preserve ecosystems
- Build community relationships
- Engage globally

USDOT developed its climate action plan pursuant to the federal EO 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021). EO 14008 recognized the threats of climate change to national security and ordered federal government agencies to prioritize actions on climate adaptation and resilience in their programs and investments (The White House 2021).

FHWA Order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

STATE EFFORTS

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. A number of state policies and tools have been developed to guide adaptation efforts.

California's Fourth Climate Change Assessment (Fourth Assessment) (State of California 2018) is the state's effort to "translate the state of climate science into useful information for action." It provides information that will help decision makers across sectors and at state, regional, and local scales protect and build the resilience of the state's people, infrastructure, natural systems, working lands, and waters. The State's approach recognizes that the consequences of climate change occur at the intersections of people, nature, and infrastructure. The Fourth Assessment reports that if no measures are taken to reduce GHG emissions by 2021 or sooner, the state is projected to experience a 2.7 to 8.8 degrees Fahrenheit increase in average annual maximum daily temperatures, with impacts on agriculture, energy demand, natural systems, and public health; a two-thirds decline in water supply from snowpack and water shortages that will impact agricultural production; a 77% increase in average area burned by wildfire, with consequences for forest health and communities; and large-scale erosion of up to 67% of Southern California beaches and inundation of billions of dollars' worth of residential and commercial buildings due to sea level rise (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the Coastal Zone. Major urban airports will be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco Airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event will triple to 370 by 2100, and 3,750 miles will be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

In 2008, then-governor Arnold Schwarzenegger recognized the need when he issued EO S-13-08, focused on sea level rise. Technical reports on the latest sea level rise science were first published in 2010 and updated in 2013 and 2017. The 2017 projections of sea level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018. This EO also gave rise to the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan), which addressed the full range of climate change impacts and recommended adaptation strategies. The Safeguarding California Plan was updated in 2018 and again in 2021 as the *California Climate Adaptation*

Strategy, incorporating key elements of the latest sector-specific plans such as the *Natural and Working Lands Climate Smart Strategy*, *Wildfire and Forest Resilience Action Plan*, *Water Resilience Portfolio,* and the CAPTI (described above). Priorities in the 2021 California Climate Adaptation Strategy include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, nature-based climate solutions, use of best available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2022b).

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change in addition to sea level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group to help actors throughout the state address the findings of California's Fourth Climate Change Assessment. It released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*, in 2018. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts (Climate Change Infrastructure Working Group 2018).

CALTRANS ADAPTATION EFFORTS

Caltrans Vulnerability Assessments

Caltrans completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments guide analysis of at-risk assets and development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

Project Adaptation Efforts

Sea Level Rise

The proposed project is outside the Coastal Zone and not in an area subject to sea level rise. Accordingly, direct impacts to transportation facilities due to projected sea level rise are not expected.

Precipitation and Flooding

The Caltrans *Climate Change Vulnerability Assessment for District* 3 (Caltrans 2020a) assessed the potential climate impacts to the district's portion of the State Highway System (SHS) and created a database comprising climate stressors and their relative geospatial data to gauge the vulnerability of the SHS and other Caltrans assets to these stressors. To determine impacts to the SHS due to precipitation and flooding, the 100-year storm event was modeled to help explain how 100-year storm rainfall is predicted to change. For the proposed project area, the 100-year storm rainfall event was utilized for considering infrastructure needs that can accommodate heavier storm events as it is often applied in designing transportation facilities and is a design consideration in the 2020 Caltrans Highway Design Manual. The proposed project is being designed to incorporate future raised elevation needs of the road surface.

Wildfire

The project is located in a Local Responsible Area (LRA), as identified in the CAL FIRE Hazard Severity Zone mapping tool (CAL FIRE 2020). Caltrans Standard Specifications mandate fire prevention procedures, including a fire prevention plan, to avoid accidental fire starts during construction (Caltrans 2018). The project features and scope do not include adaptations to fire vulnerability.

Temperature

The *Caltrans Climate Change Vulnerability Assessment for District 3* (Caltrans 2020a) uses climate data provided by the Scripps Institution of Oceanography to project average maximum temperature increases over the course of seven consecutive days throughout District 3. The project area reflects an average weekly temperature increase of approximately ten to eleven degrees through year 2085. Average minimum temperature increase was also projected with minimum temperature increasing four to five degrees through 2055 and seven to eight degrees through 2085.

Design aspects for this project that were chosen due to temperature considerations include pavement binder (PG 64-16) selection based on climate region which ensures performance grading designed to withstand specific temperature ranges within the project location:

- Rubberized hot mix asphalt (RHMA) pavement utilized to resist thermal stresses created by wide temperature fluctuations; however this can only be used at elevations below 3,000 feet.
- Joint Plain Concrete Pavement (JPCP) for the higher elevations, which is dowelled at the joints to account for blowups from high temperatures. Additionally, thick asphalt layers (comprising varying layers) provide greater flexibility because they can be easily modified over time to accommodate climate change impacts without affecting the underlying structure.

2.9 Hazards and Hazardous Materials

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				✓
Would the project: 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?				✓
Would the project: c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
Would the project: 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?				✓
Would the project: 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?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
Would the project: g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Hazardous Waste Initial Site Assessment* dated August 3, 2022. The project would not routinely transport, use or dispose of hazardous materials. Standard Measures and Best Management Practices (Section 1.6) would be applied for construction of the project to contain any lead, naturally occurring asbestos, or treated wood waste in compliance with local, state and federal laws, including response to accidental release of these materials. The project would not emit hazardous emissions, handle hazardous materials, substance or waste within any existing schools. The nearest school is approximately 3.5 miles southeast of the project location in the Twin Cities community. The project site is not listed on the Cortese or California Superfund site list. The project is not located within an airport land use plan. The project would not interfere with emergency response or evacuation; a Transportation Management Plan during construction of the project would be implemented to address emergency response. The project would not expose people or structures to loss, injury or death involving wildland fire.

2.10 Hydrology and Water Quality

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			✓	
Would the project: b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			✓	
Would the project: c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;			✓	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			✓	
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			✓	
(iv) impede or redirect flood flows?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				✓
Would the project: e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✓	

The "No Impact" and "Less Than Significant Impact" determinations in this section are based on the scope, description, and location of the proposed project, the *Water Quality Assessment* dated May 23, 2023 (Caltrans 2023e), *Draft Final Hydraulic Report* dated April 14, 2023 (Caltrans 2023i), and the *Floodplain Hydraulic Study* dated November 28, 2022 (Caltrans 2022). The proposed project would raise the profile of the left Willow Slough Bridge to match the existing right bridge.

The project location is within the 100-year floodplain Zone A, and is considered a transverse floodplain encroachment. There would be no site changes that would impede or redirect flood flows. The bridge replacement is not a longitudinal floodplain encroachment and would not release pollutants in the event of a 100-year flood. The project is not located in a tsunami or seiche zone. The project would be constructed implementing measures described in the SWPPP.

Regulatory Setting

The primary laws and regulations governing hydrology and water quality include:

- Federal: Clean Water Act (CWA)–33 USC 1344
- Federal: Executive Order for the Protection of Wetlands–EO 11990
- State: California Fish and Game Code (CFGC)–Sections 1600–1607
- State: Porter-Cologne Water Quality Control Act– Sections 13000 et seq.

Affected Environment

The proposed project location is in a climate with cool, rainy winter weather, averaging about 20 inches, with 75% occurring during the rainy season, November through March. Areas adjacent to the existing bridge embankment slopes become inundated annually. There are no existing treatment BMPs within the project limits.

Environmental Consequences

The discharge of stormwater runoff from construction sites has the potential to affect water quality standards, water quality objectives and beneficial uses. Potential pollutants and sources include sediment; non-stormwater discharges (groundwater, waters from cofferdams, dewatering, water diversions); vehicle and equipment cleaning agents, fueling, and maintenance; and waste materials and materials handling and storage activities.

Avoidance and Minimization Measures

Treatment BMPs are required for projects initiated prior to January 1, 2023, under the National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit Waste Discharge Requirements (Order Number 2012-0011-DWQ, NPDES Number CAS000003) when new impervious surface area reaches and exceeds 1.0 acre. The project will add Treatment BMP features to the final design during 1-Phase.

Discussion of CEQA Environmental Checklist Question 2.10—Hydrology and Water Quality

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. Construction-related activities would result in surface disturbances with the potential to violate water quality standards and Waste Discharge Requirements (WDRs) if sediment or contaminant-laden runoff from work areas enters storm drains or other pathways leading to receiving waters. However, it is anticipated the project will be regulated under the Construction General Permit (CGP) and appropriate compliance measures will be implemented to avoid discharges and potential water quality threats within the project area. As an example, compliance with the CGP requires a risk level analysis based on the project's potential erosion and transport to receiving waters. The results of this analysis will be utilized to determine standard water quality protection measures (to be implemented) in order to avoid surface and ground water quality degradation during

construction operations. It is anticipated that BMP usage, placement, field implementation and effectiveness will be monitored, adjusted, and modified (accordingly) for the duration of the project. Compliance with all applicable NPDES Permits, in addition to coordination with the Regional Water Quality Board, is expected to ensure the protection of water resources in the area.

For projects having 1 acre or more of new impervious area, Caltrans' MS4 Permit requires the implementation of stormwater design features and a strategy to treat runoff and manage impervious and pervious areas within the project limits. Specific design features will be vetted, and decisions made (stormwater related) will be documented within project design and environmental technical studies.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The intended use of the facility and potential pollutants that will be encountered in stormwater runoff after the project is constructed are not anticipated to change from its current condition. The groundwater elevation within this corridor historically fluctuates but is not anticipated to permanently impact proposed drainage appurtenances, stormwater treatment, or other design features. Additionally, due to excavation occurring on a temporary and short-term basis during the construction period, groundwater resources should not be affected and it is not anticipated that the project would negatively impact regional sustainable groundwater management (within the project vicinity).

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Compliance with the Construction General Permit (GCP) is anticipated to address the implementation of minimization and avoidance measures. It is expected that standard construction erosion control measures will be utilized to avoid erosion and siltation for the duration of project activities. BMP measures and field implementation strategies will be outlined in the Contractor prepared and Caltrans approved SWPPP. These will likely include temporary soil stabilization measures, linear sediment barriers (i.e., silt fence, gravel bag berms, fiber rolls), and construction site waste management (i.e., concrete

washout, construction materials storage, litter/ waste management) among other approved controls.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. It is anticipated that the drainage system design will focus on perpetuating existing highway drainage conditions to the greatest extent feasible. New drainage features will be designed to perpetuate flow in the existing direction and will have similar or greater capacity than what currently exists in support of current design standards and the proposed design features for the project.

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?

Less Than Significant Impact. The project includes additional impervious surface from the proposed project features. There will be 1.66 acres of temporary impervious surface added, which will be removed upon completion of construction. The completed bridge will include an estimated 1.5 acres additional impervious surface area. Drainage appurtenances within the project limits will be designed to accommodate the anticipated change in flow. In compliance with Caltrans' MS4 Permit, treatment BMPs will be incorporated into the project design, where applicable and feasible, to treat the new impervious area anticipated for the project. The implementation of Standard Measures and BMPs (Section 1.6) meant to treat general pollutants will be evaluated and an analysis of site characteristics to optimize water quality volume/water quality flow and maximize site perviousness will be performed.

iv. Impede or redirect flood flows?

No Impact. The "No Impact" determination in this section is based on the scope, description, and location of the proposed project, the *Water Quality Assessment* dated May 23, 2023 (Caltrans 2023e), *Draft Final Hydraulic Report* dated April 14, 2023 (Caltrans 2023i), and the *Floodplain Hydraulic Study* dated November 28, 2022.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. The "No Impact" determination in this section are based on the scope, description, and location of the proposed project, the *Water Quality Assessment* dated May 23, 2023 (Caltrans 2023e), *Draft Final Hydraulic Report* dated April 14, 2023 (Caltrans 2023i), and the *Floodplain Hydraulic Study* dated November 28, 2022.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. It is expected that temporary impacts to localized water quality and groundwater that may occur will be minimized and/or avoided through the use of Caltrans Standard Measures and BMPs and adherence to the NPDES Permit (i.e., CGP and Caltrans' MS4) compliance practices. Water quality measures, meant to promote stormwater infiltration practices and low impact development, would be implemented. Additionally, due to excavation occurring on a temporary and short-term basis during the construction period, groundwater resources should not be affected to any great extent or degree.

2.11 Land Use and Planning

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Physically divide an established community?				✓
Would the project: 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?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project as well as the Sacramento County General Plan (Sacramento General Plan 2005-2030, 2011). The proposed project is consistent with the Sacramento County General Plan which aims to promote efficient inter-regional goods movement on SR 99 and to accommodate through-truck traffic. Potential impacts to land use and planning are not anticipated because the proposed project would not change the alignment of SR 99 and therefore would not physically divide any established community. The proposed project would also not conflict with existing any land use plan, policy, or regulation, as the highway alignment remains within the transportation zone.

2.12 Mineral Resources

Question:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: 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?				✓
Would the project: 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?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the lack of valued mineral resources within the project limits, as identified from the California Department of Conservation (CDC 2023a). The project does not modify availability or access to mineral resources, as there are none within the project area.

2.13 Noise

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in: 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?				✓
Would the project result in: b) Generation of excessive groundborne vibration or groundborne noise levels?				✓
Would the project result in: 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?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Noise Study Report* dated June 2, 2023 (Caltrans 2023l). The completed project is not expected to result in changes to ambient noise levels and would not generate groundborne vibration or noise. The project location is approximately 5.25 miles from the Franklin Field Airport and would not expose residents or workers to excessive noise levels.

2.14 Population and Housing

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: 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)?				✓
Would the project: b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Impacts to population and housing are not anticipated because the project would not increase/add or change highway access and would not extend any roads or other infrastructure associated with land use developments. There are no residences within the project area, and no permanent right of way acquisition would be required for the project construction or operation. Therefore, the project would have no impact on population and housing.

2.15 Public Services

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project. No schools, parks, or other public facilities were identified in the project area; therefore, public services ratios would not be impacted.

2.16 Recreation

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				✓
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project. The proposed project would not increase the use of existing neighborhood parks, regional parks, or other recreational facilities as there is no change in access to the surrounding areas, which are not managed as recreational facilities. The project would not require the construction or expansion of recreational facilities.

2.17 Transportation

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				✓
Would the project: b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?				✓
Would the project: c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				✓
Would the project: d) Result in inadequate emergency access?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, which is included in the SACOG Regional Transportation Plan/ Sustainable Communities Strategy (SACOG 2012). The project has been screened pursuant to CEQA Guidelines § 15064.3, subdivision (b) and has been determined to be a project not likely to induce travel (induced travel occurs when lanes are added to a system). The proposed project does not change the geometrics of the highway. Emergency access will remain open during construction to keep the highway use consistent with local emergency and evacuation plans.

2.18 Tribal Cultural Resources

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k), or				✓
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				✓

The “No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Historical Property Survey Report* (Caltrans 2023b), cultural resources studies, and consultation with local Native American Tribes beginning in December 2022, which will remain ongoing throughout the life of the project. Consultation with the Native American Heritage Commission and Native American tribes, groups, and individuals was conducted by the District Native American Coordinator (DNAC) Katherine Abernathy. In addition, letters and project information were sent to local historical societies, including the Sacramento County Historical Society. Wilton Rancheria provided a map of areas of concern that include the project and surrounding area. They have requested monitoring for all ground-disturbing activities.

2.19 Utilities and Service Systems

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities—the construction or relocation of which could cause significant environmental effects?				✓
Would the project: b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				✓
Would the project: 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?				✓
Would the project: 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?				✓
Would the project: e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				✓

The “No Impact” determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts are not anticipated due to the proposed project not requiring utility relocation or newly constructed utilities. The highway use does not require water supply or wastewater treatment and does not generate solid waste.

2.20 Wildfire

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near State Responsibility Areas (SRA) or lands classified as very high fire hazard severity zones, would the project: a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				✓
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or may result in temporary or ongoing impacts to the environment?				✓
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✓

Senate Bill 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection (CAL FIRE) to develop amendments to the "CEQA Environmental Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as *very high* Fire Hazard Severity Zones. The 2018 updates to the CEQA Guidelines expanded this to include projects "near" these *very high* Fire Hazard Severity Zones.

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the CAL FIRE Fire Hazard Severity Zone map (CAL FIRE 2020) and the California Landside Inventory map (CDC 2019). The project is not located in an area of high landslide risk, so no impact is anticipated from fire-related landslides. The project would comply with all regulations and would not expose people or structures to fire- related flooding.

CAL FIRE's Fire Hazard Severity Zone mapping tool indicates the project area is not exposed to wildfire concern. While the project area is outside the Local Responsibility Area and within the State Responsibility Area for Wildfire, the project would not have an impact on wildfire due to:

- The addition of wider shoulders and median would increase the width of the road as a firebreak and provide additional areas for emergency response vehicles.
- TMS elements, including Changeable Message Signs, would provide critical information during an emergency and can be used to alert the public during times of high fire danger.

Additionally, prior to construction, Caltrans would develop a Transportation Management Plan that would be required during construction to keep the highway use consistent with local emergency and evacuation plans.

2.21 Mandatory Findings of Significance

Does the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				✓
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				✓
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				✓

The California Environmental Quality Act of 1970 (CEQA) requires preparation of an Environmental Impact Report (EIR) when certain specific impacts may result from construction or implementation of a project. Project analyses indicated the potential impacts associated with this project would not require an EIR because of the minimal impacts incurred by the project scope and temporary construction activities discussed herein. Mandatory Findings of Significance are not required for projects where an EIR has not been prepared.

2.22 Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative impact 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 (CEQA § 15355).

Cumulative impacts to resources 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.

Per Section 15130 of CEQA, a Cumulative Impact Analysis (CIA) discussion is only required in "…situations where the cumulative effects are found to be significant." The proposed project does not have impacts that are cumulatively considerable when viewed with the effects of past and future projects. Given this, an EIR and CIA were not required for this project.

Chapter 3. Agency and Public Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings, interagency coordination meetings, and interagency coordination. This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

The following agencies, organizations, and individuals were consulted in the preparation of this environmental document.

Coordination with Resource Agencies

The following agencies/resources were consulted regarding potential impacts of the project.

Table 4. Agency Coordination and Professional Contacts

Date	Personnel	Notes
June 7, 2023	Eric Hansen (Independent Consultant)	Consultation on Giant garter snake (GGS).
June 9, 2023	Mary Xiong (CDFW)	Discussed potential direct and indirect effects on Waters of the United States and potential suitable habitat.
June 21, 2023	Adam Stewart (USFWS)	Discussed the potential effects on giant garter snake and vernal pool habitat.

Coordination with Property Owners

Consent from property owners of APN 134-0270-017-0000 was obtained via a Permit To Enter for evaluation of cultural and biological resources within their property, which is overlapped by the Environmental Study Limits. A Temporary Construction Easement for 1.02 acres will be required from the property owners for access to and construction activities on the same property.

Circulation

The Initial Study/proposed Negative Declaration (IS/ND) will be available for public and agency review and comment for 30 days from its posting on the Office of Planning and Research–State Clearinghouse website. Caltrans will provide its Notice of Intent (NOI) to adopt this proposed ND to the public, responsible agencies, trustee agencies, and the county clerk of Sacramento County, as well as the adjacent property owners. A printed copy of the Initial Study/Proposed ND will be made available at the Elk Grove Library, located at 8900 Elk Grove Boulevard, Elk Grove, CA 95624.

Chapter 4. List of Preparers

The following individuals performed the environmental work and contributed to the preparation of the Initial Study/Proposed Negative Declaration for this project:

California Department of Transportation–District 3

Danielle Claus	Associate Environmental Planner/Archaeology Contribution: Historical Properties Survey Report
Sean Cross	Water Quality Specialist Contribution: Water Quality Report
Erin Damm	Senior Environmental Planner Contribution: Environmental Branch Chief
Jonathan Edwards	Associate Environmental Planner/Project Biologist Contribution: Natural Environment Study
Katherine Jorgensen-Abernathy	Associate Environmental Planner/Archaeology Contribution: Native American Consultation
Jason Lee	Air Specialist Contribution: Air Quality, Energy and Greenhouse Gas Emission Analysis
Alamjit Mangat	Hazardous Waste Specialist Contribution: Initial Site Assessment
Masum Patwary	Environmental Scientist/Coordinator Contribution: Document Author
Ryan Pommerenck	Noise Specialist Contribution: Noise Study Report
Yige Sunn	Landscape Architect Contribution: Visual Impact Assessment

Chapter 5. Distribution List

Federal and State Agencies

U.S. Army Corps of Engineers
Sacramento District
Attn: Regulatory Branch
1325 J Street
Sacramento, CA 95814-2922

State Historic Preservation Officer
Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296

California Department of Fish and Wildlife
North Central Region
1701 Nimbus Road
Rancho Cordova, CA 95670

California Highway Patrol
50 Canyon Creek Road
Gold Run, CA 95717

Regional/County/Local Agencies

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

County of Sacramento, Department of Transportation
Director's Office
4111 Branch Center Road
Sacramento, CA 95827

Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

Local Elected Officials

District 5 Supervisor Pat Hume
700 H Street, Suite 2450
Sacramento, CA 95814

Property Owners

Nature Conservancy Sacramento
830 South Street
Sacramento, CA 95811

California Department of Fish and Wildlife
Administrative Division, Business Management
1416 9th Street, 12th Floor
Sacramento, CA 95814

Chapter 6. References

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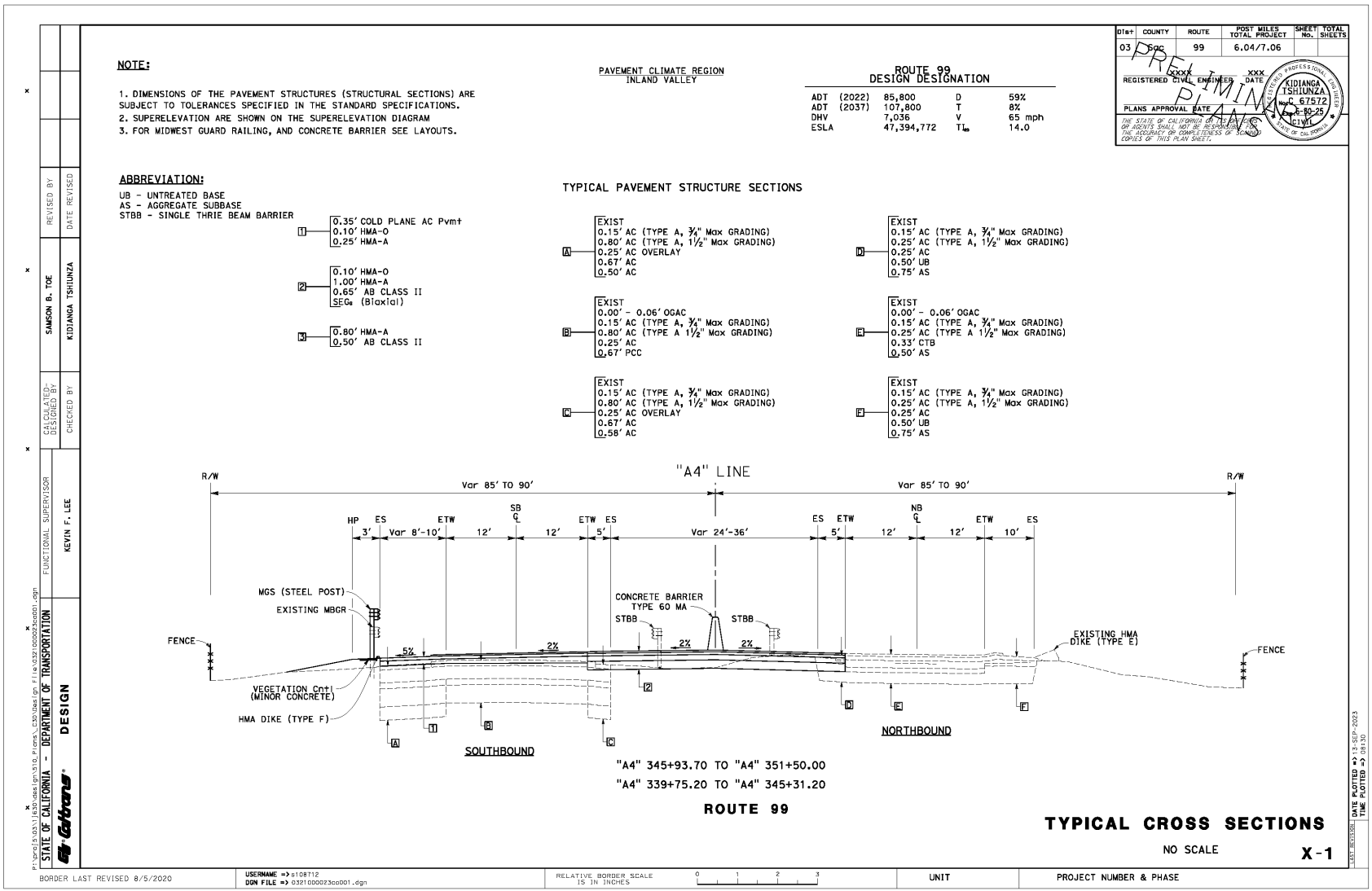
Appendix A. Project Layouts


NOTE:
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION ARE SHOWN ON THE SUPERELEVATION DIAGRAM
3. FOR MIDWEST GUARD RAILING, AND CONCRETE BARRIER SEE LAYOUTS.
PAVEMENT CLIMATE REGION
INLAND VALLEY
ROUTE 99
DESIGN DESIGNATION
ADT (2022) 85,800 D 59%
ADT (2037) 107,800 T 8%
DHV 7,036 V 65 mph
ESLA 47,394,772 TI 14.0
Dist COUNTY ROUTE POST MILES TOTAL PROJECT SHEET No. TOTAL SHEETS
03 Sac 99 6.04/7.06
PRELIMINARY
XXXX REGISTERED CIVIL ENGINEER
XXX DATE
KIDIANGA TSHIUNZA
No. C 67572
6-30-25
CIVIL
STATE OF CAL FORNIA
PLANS APPROVAL DATE
ABBREVIATION:
UB - UNTREATED BASE
AS - AGGREGATE SUBBASE
STBB - SINGLE THRIE BEAM BARRIER
TYPICAL PAVEMENT STRUCTURE SECTIONS
1 0.35' COLD PLANE AC Pvmt
0.10' HMA-O
0.25' HMA-A
2 0.10' HMA-O
1.00' HMA-A
0.65' AB CLASS II
SEG (Biaxial)
3 0.80' HMA-A
0.50' AB CLASS II
A EXIST
0.15' AC (TYPE A, 3/4" Max GRADING)
0.80' AC (TYPE A, 1 1/2" Max GRADING)
0.25' AC OVERLAY
0.67' AC
0.50' AC
B EXIST
0.00' - 0.06' OGAC
0.15' AC (TYPE A, 3/4" Max GRADING)
0.80' AC (TYPE A 1 1/2" Max GRADING)
0.25' AC
0.67' PCC
C EXIST
0.15' AC (TYPE A, 3/4" Max GRADING)
0.80' AC (TYPE A, 1 1/2" Max GRADING)
0.25' AC OVERLAY
0.67' AC
0.58' AC
D EXIST
0.15' AC (TYPE A, 3/4" Max GRADING)
0.25' AC (TYPE A, 1 1/2" Max GRADING)
0.25' AC
0.50' UB
0.75' AS
E EXIST
0.00' - 0.06' OGAC
0.15' AC (TYPE A, 3/4" Max GRADING)
0.25' AC (TYPE A 1 1/2" Max GRADING)
0.33' CTB
0.50' AS
F EXIST
0.15' AC (TYPE A, 3/4" Max GRADING)
0.25' AC (TYPE A, 1 1/2" Max GRADING)
0.25' AC
0.50' UB
0.75' AS
"A4" LINE
R/W
Var 85' TO 90'
Var 85' TO 90'
R/W
HP ES ETW SB ETW ES ES ETW NB ETW ES
3' Var 8'-10' 12' 12' 5' Var 24'-36' 5' 12' 12' 10'
MGS (STEEL POST)
EXISTING MBGR
CONCRETE BARRIER TYPE 60 MA
STBB
STBB
FENCE
5%
2%
2%
2%
EXISTING HMA DIKE (TYPE E)
FENCE
VEGETATION Cntl (MINOR CONCRETE)
HMA DIKE (TYPE F)
SOUTHBOUND
NORTHBOUND
"A4" 345+93.70 TO "A4" 351+50.00
"A4" 339+75.20 TO "A4" 345+31.20
ROUTE 99
TYPICAL CROSS SECTIONS
NO SCALE
X-1
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
FUNCTIONAL SUPERVISOR
KEVIN F. LEE
CALCULATED/ DESIGNED BY
SAMSON B. TOE
CHECKED BY
KIDIANGA TSHIUNZA
REVISED BY
DATE REVISED
DATE PLOTTED => 13-SEP-2023
TIME PLOTTED => 08:30
BORDER LAST REVISED 8/5/2020
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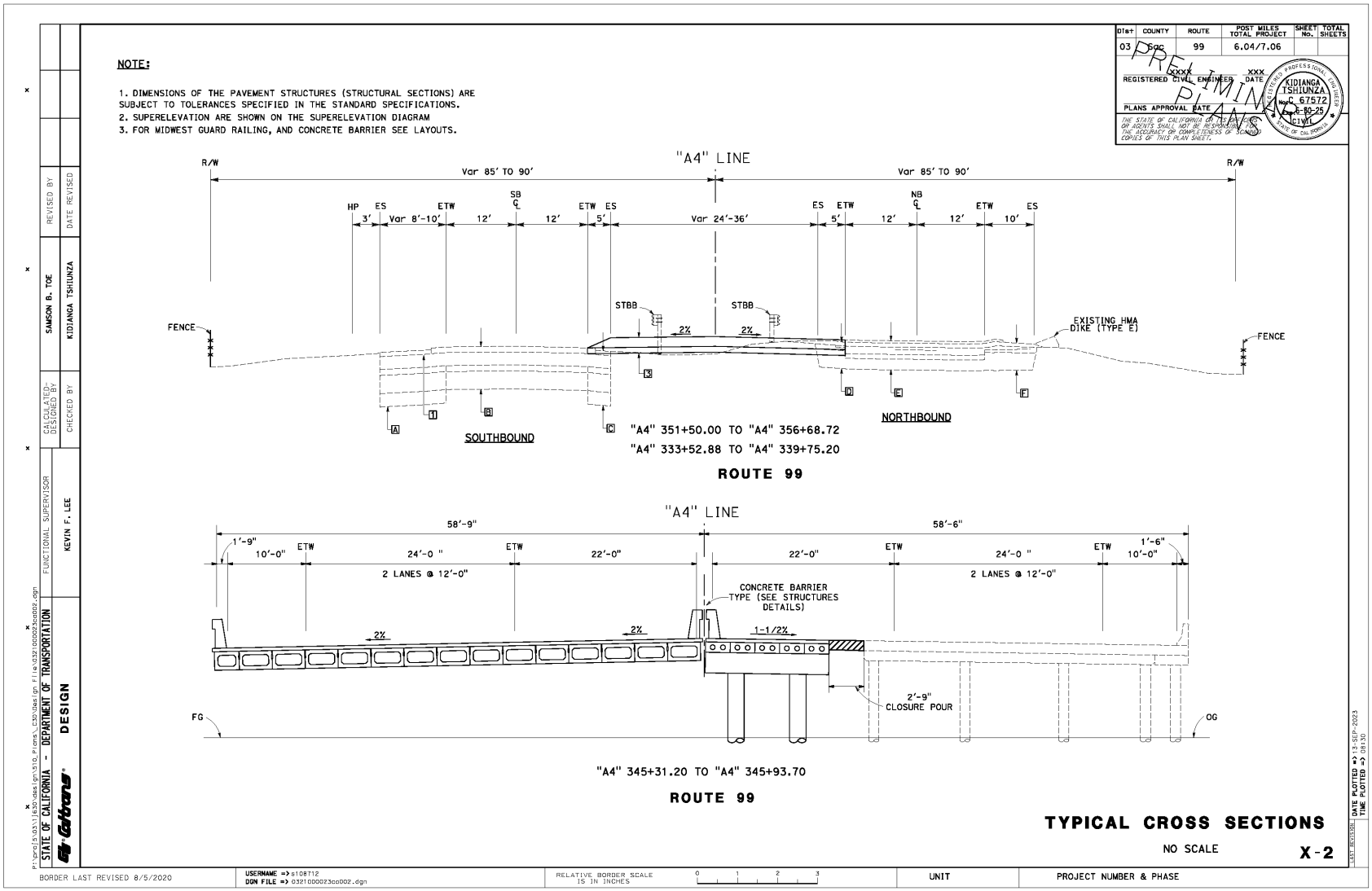
0 1 2 3
UNIT
PROJECT NUMBER & PHASE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2. SUPERELEVATION ARE SHOWN ON THE SUPERELEVATION DIAGRAM
3. FOR MIDWEST GUARD RAILING, AND CONCRETE BARRIER SEE LAYOUTS.
Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS
03 | SAC | 99 | 6.04/7.06
PRELIMINARY
REGISTERED CIVIL ENGINEER
DATE
KIDIANGA TSHIUNZA
No. C 67572
6-30-25
CIVIL
PLANS APPROVAL DATE
"A4" LINE
R/W
Var 85' TO 90'
HP ES ETW SB ℄ ETW ES
3' Var 8'-10' 12' 12' 5' Var 24'-36'
ES ETW NB ℄ ETW ES
5' 12' 12' 10'
STBB
2%
FENCE
EXISTING HMA DIKE (TYPE E)
SOUTHBOUND
NORTHBOUND
"A4" 351+50.00 TO "A4" 356+68.72
"A4" 333+52.88 TO "A4" 339+75.20
ROUTE 99
58'-9"
58'-6"
1'-9"
10'-0"
24'-0 "
22'-0"
1'-6"
2 LANES @ 12'-0"
CONCRETE BARRIER TYPE (SEE STRUCTURES DETAILS)
1-1/2%
2'-9" CLOSURE POUR
FG
OG
"A4" 345+31.20 TO "A4" 345+93.70
ROUTE 99
TYPICAL CROSS SECTIONS
NO SCALE
X-2
DESIGN
DEPARTMENT OF TRANSPORTATION
STATE OF CALIFORNIA
FUNCTIONAL SUPERVISOR: KEVIN F. LEE
CALCULATED/DESIGNED BY: KIDIANGA TSHIUNZA
CHECKED BY: SAMSON B. TOE
REVISED BY
DATE REVISED
DATE PLOTTED => 13-SEP-2023
TIME PLOTTED => 08:30
BORDER LAST REVISED 8/5/2020
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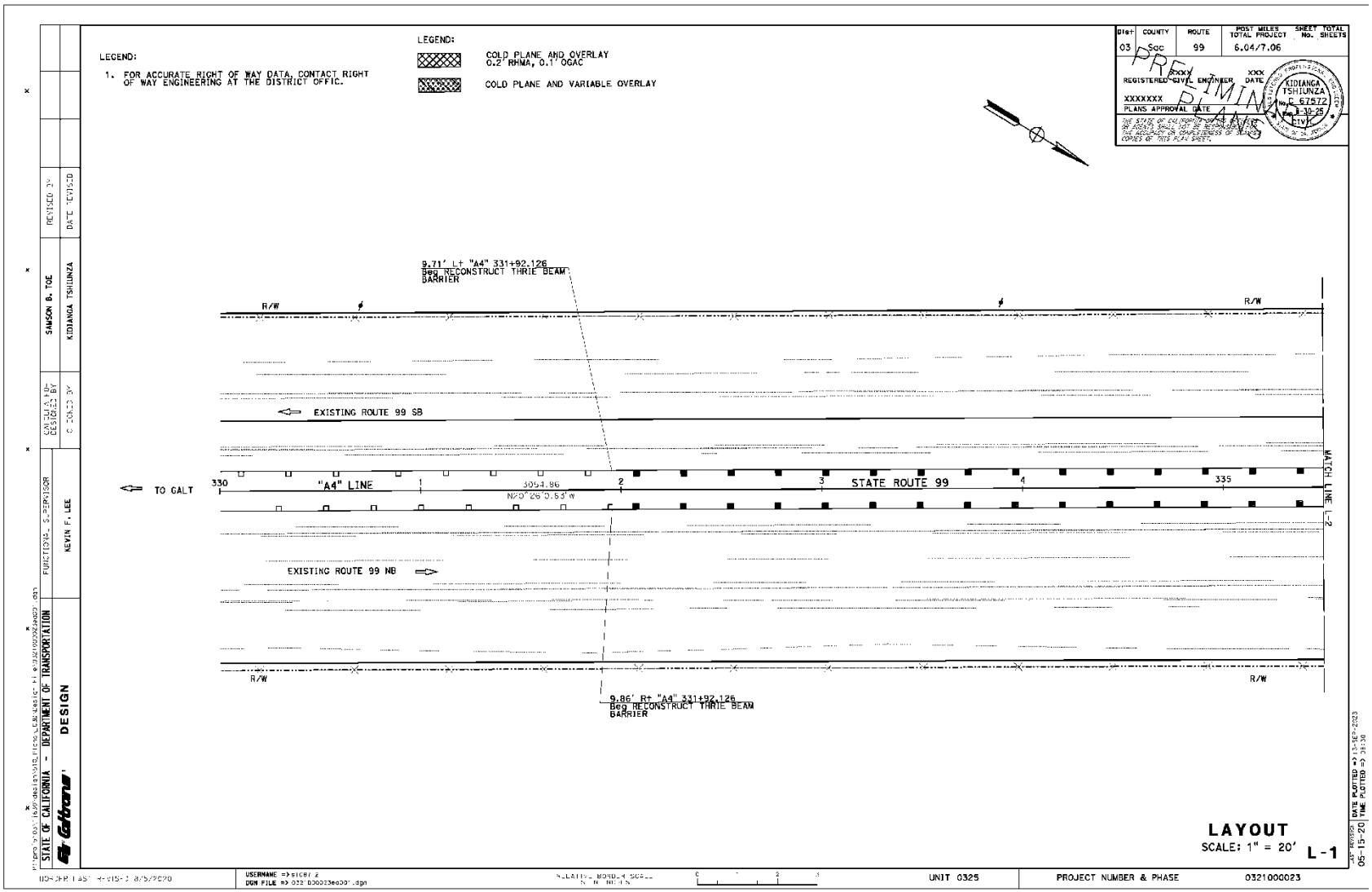
UNIT
PROJECT NUMBER & PHASE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LEGEND:
COLD PLANE AND OVERLAY 0.2' RHMA, 0.1' OGAC
COLD PLANE AND VARIABLE OVERLAY
Dist 03 | COUNTY Sac | ROUTE 99 | POST MILES TOTAL PROJECT 6.04/7.06 | SHEET TOTAL No. SHEETS
PRELIMINARY PLANS
REGISTERED CIVIL ENGINEER XXXX DATE XXX
PLANS APPROVAL DATE XXXXXXX
KIDIANGA TSHILUNZA No. C 67572 Exp. 3-30-25 CIVIL
9.71' Lt "A4" 331+92.126 Beg RECONSTRUCT THRIE BEAM BARRIER
R/W
EXISTING ROUTE 99 SB
TO GALT
330
"A4" LINE
3054.86
N20°26'0.53"W
STATE ROUTE 99
335
EXISTING ROUTE 99 NB
9.86' Rt "A4" 331+92.126 Beg RECONSTRUCT THRIE BEAM BARRIER
WATCH LINE L-2
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
FUNCTIONAL SUPERVISOR KEVIN F. LEE
CHECKED BY
DESIGNED BY SAMSON B. TOE
DRAWN BY KIDIANGA TSHILUNZA
REVISED BY
DATE REVISED
LAYOUT
SCALE: 1" = 20'
L-1
DATE PLOTTED => 13-SEP-2023
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UNIT 0325
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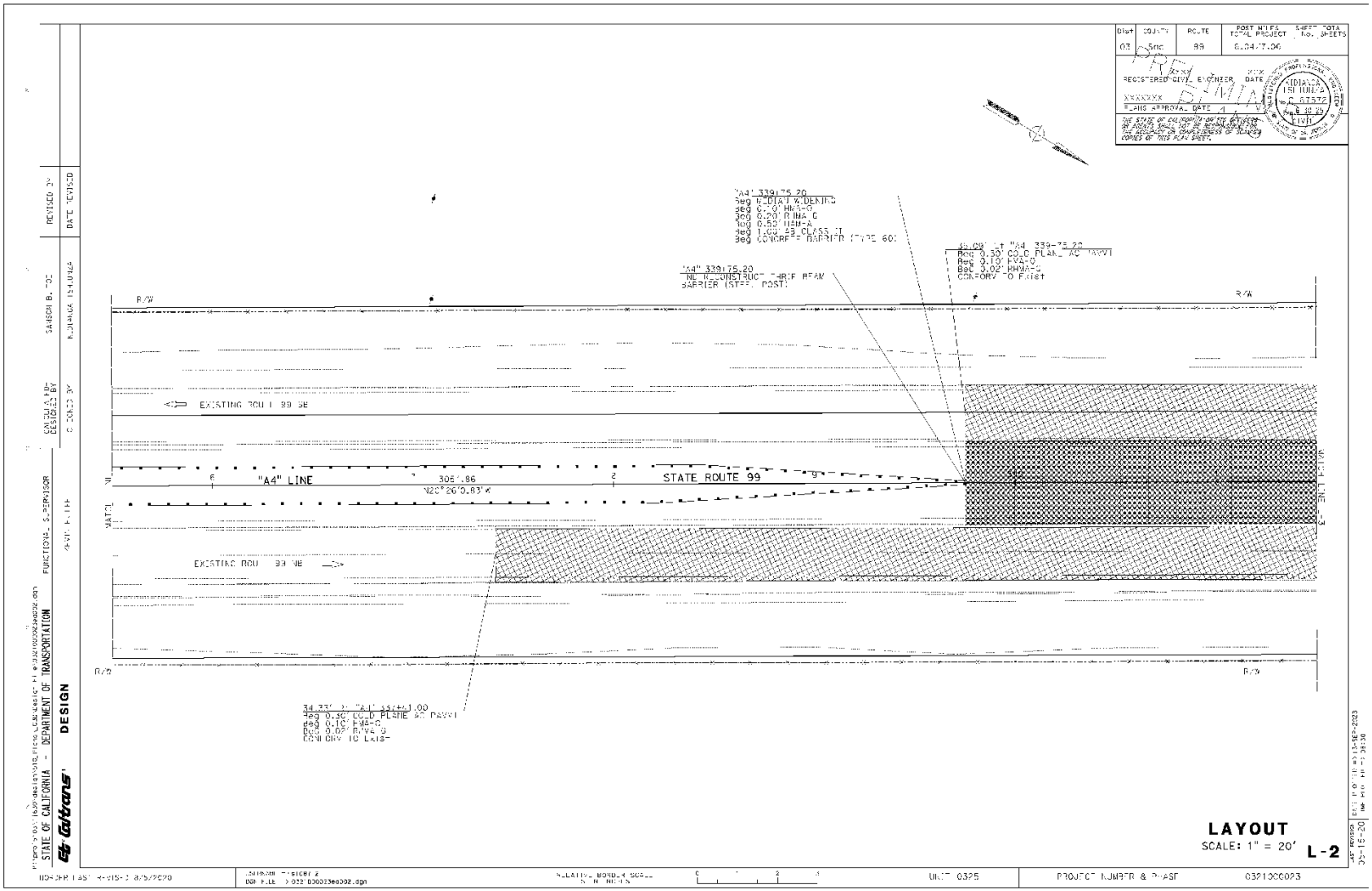
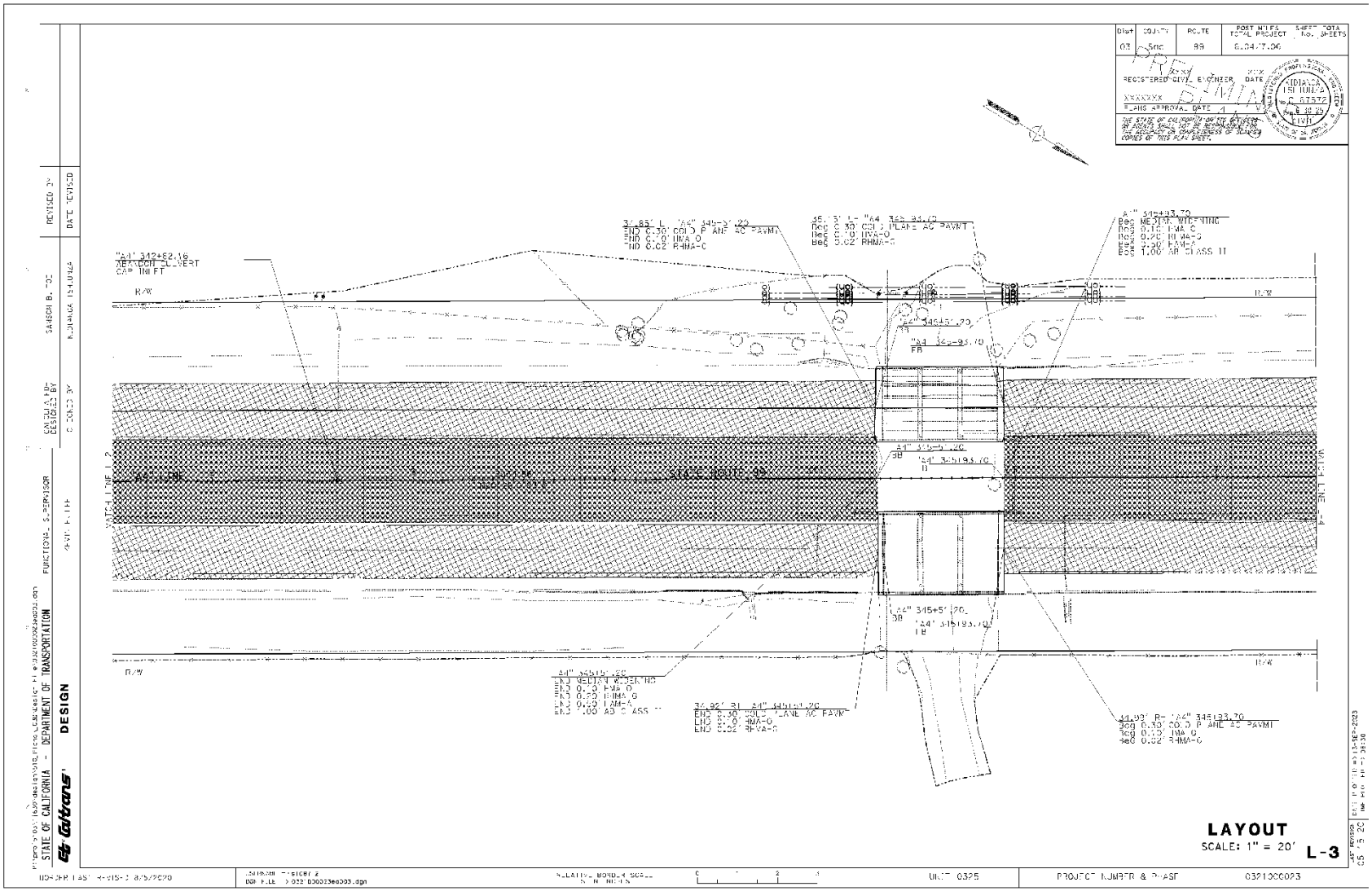

DIST
03
COUNTY
SAC
ROUTE
99
POST MILES
TOTAL PROJECT
SHEET NO.
TOTAL SHEETS
6.04/7.06
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
REVISED BY
DATE REVISED
SACRAMENTO
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
FUNCTIONAL SUPERVISOR
EXISTING ROUTE 99 SB
"A4" LINE
305'.86
N20°26'0.83"W
STATE ROUTE 99
EXISTING ROUTE 99 NB
R/W
LAYOUT
SCALE: 1" = 20'
L-2
UNIT 0325
PROJECT NUMBER & PHASE
0321000023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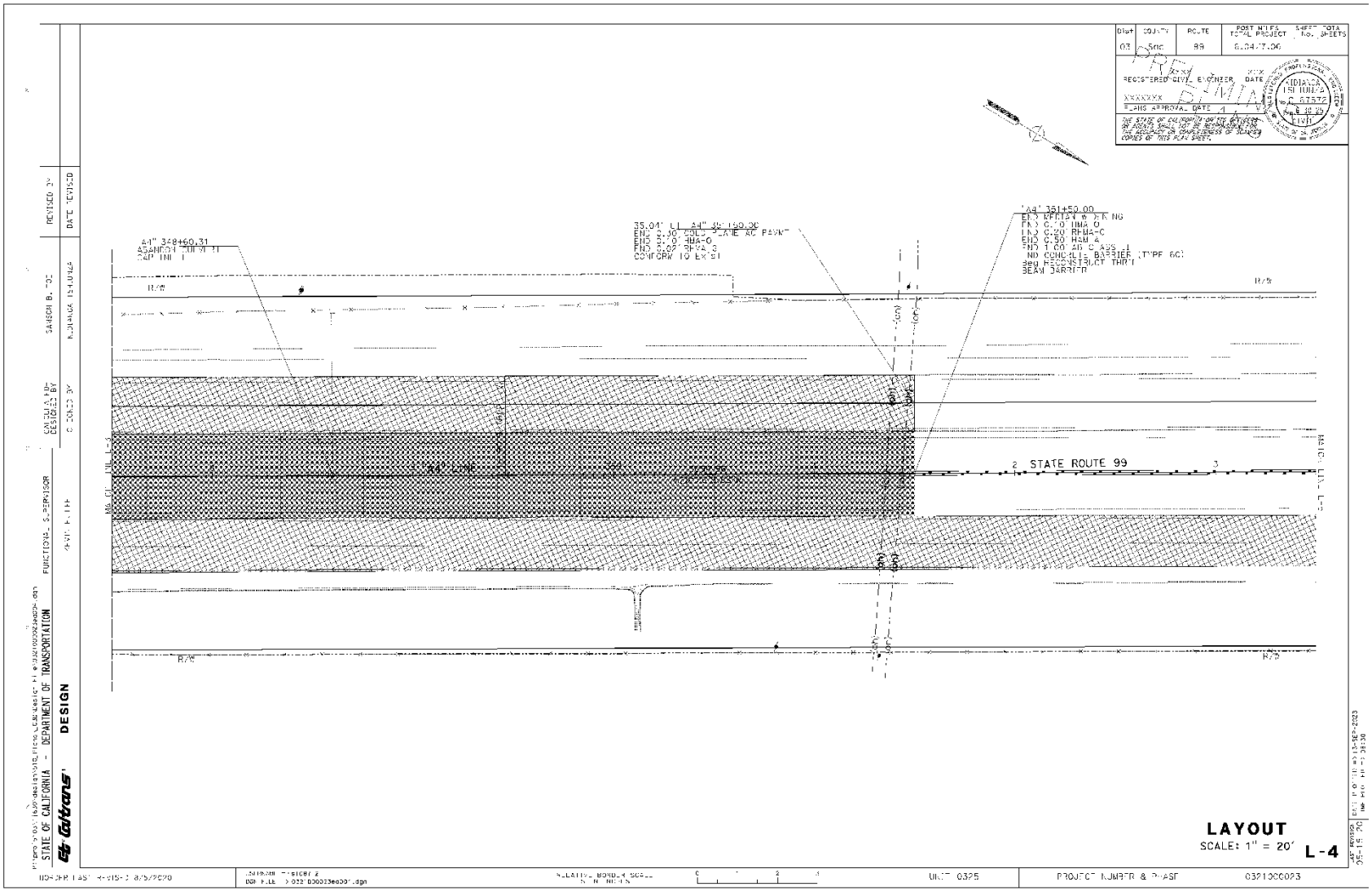
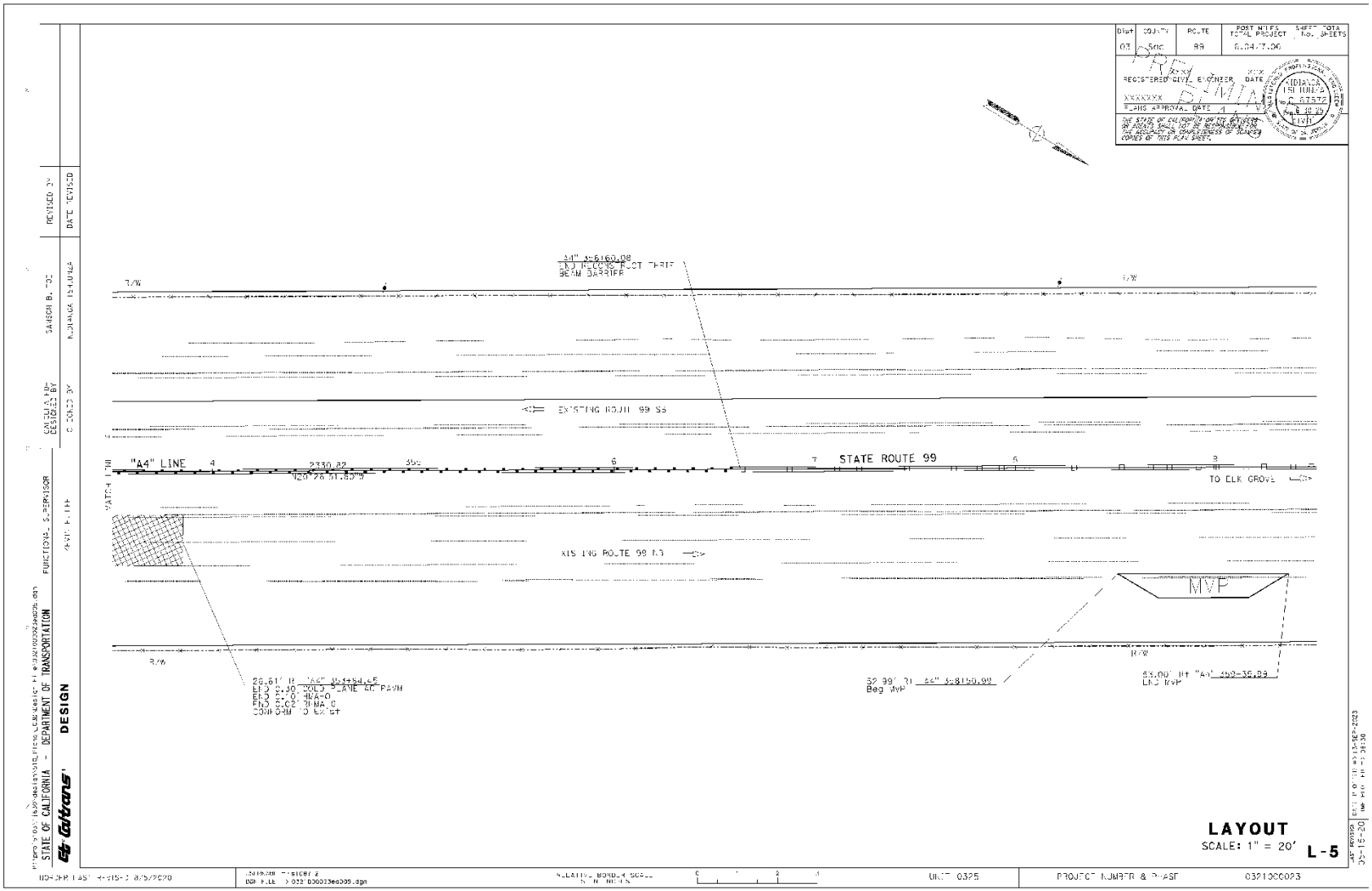
DEPARTMENT OF TRANSPORTATION
STATE OF CALIFORNIA
LAYOUT
SCALE: 1" = 20'
L-3


DESIGN
DEPARTMENT OF TRANSPORTATION
STATE OF CALIFORNIA
STATE ROUTE 99
LAYOUT
SCALE: 1" = 20'
L-4


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
FUNCTIONAL SUPERVISOR
DATE REVISED
"A4" LINE
STATE ROUTE 99
TO ELK GROVE
EXISTING ROUTE 99 SB
EXISTING ROUTE 99 NB
MVP
R/W
LAYOUT
SCALE: 1" = 20'
L-5

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Scr	99	6.04/7.06		

PRELIMINARY

REGISTERED ELECTRICAL ENGINEER DATE

DAMON JENKINS No. E24527 03-31-25 ELECTRICAL

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND (THIS SHEET ONLY):

1 EXISTING TYPE III-AF SERVICE EQUIPMENT ENCLOSURE CTID No. 03240990006851 -ADJUST TO GRADE AND LEVEL.

2 EXISTING HIGH SPEED WEIGH-IN-MOTION SYSTEM CONTROLLER CABINET.

3 INSTALL HMCCTV-90 POLE, NB PM 6.816. SEE DETAIL SHEET SES-X. INSTALL POLE MOUNTED ENCLOSURE AND EQUIPMENT AS SHOWN ON SHEET ED-XX.

CONDUIT AND CONDUCTORS (THIS SHEET ONLY):

1 1½"C,3#8, ADD 2#6

2 2"C,2#6 (HM90 POLE)

3 3"C,2#6 (HM90 POLE)

4 EXISTING 3"C, 8 SENSOR WIRES, 4 DLC

SYMBOLS:

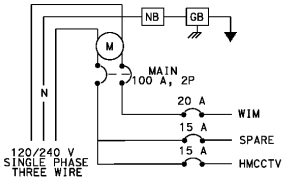
Exist WIM SCALE

WIRING DIAGRAM LEGEND:

NB NEUTRAL BUS

GB GROUND BUS

(M) METER SOCKET



MODIFIED SERVICE WIRING DIAGRAM
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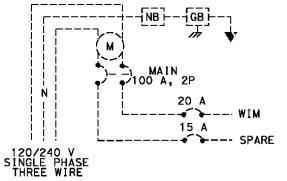

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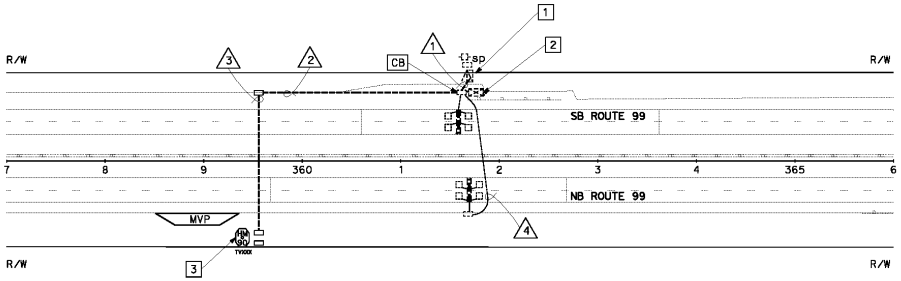

CAMERA SYSTEMS

SCALE: 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

E- 1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: STEVEN S LEE
CALCULATED/DESIGNED BY: YING LOR
CHECKED BY: DAMON JENKINS
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 13-SEP-2023
TIME PLOTTED => 08:30
10-14-22

BORDER LAST REVISED 7/2/2010
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DGN FILE => 0321000023ud001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0403
PROJECT NUMBER & PHASE 03190000231

Appendix B. Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

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

September 2022

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 non-discriminatory 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) 639-6392 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 PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

TONY TAVARES
Director

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

Appendix C. USFWS, NMFS, CNDDB, CNPS Species Lists

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Galt (3812133))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
Downingia pusilla dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Great Valley Valley Oak Riparian Forest Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G3	S3	
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Valley Oak Woodland Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	

Record Count: 23

From: Edwards, Jonathan@DOT
To: nmfs.wcrca.specieslist@noaa.gov
Subject: project willow slough needs updated species list
Date: Friday, November 3, 2023 4:33:00 PM

Quad Name **Galt**

Quad Number **38121-C3**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - **X**
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - **X**
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH - X
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult Monica DeAngelis
monica.deangelis@noaa.gov
562-980-3232

MMPA Cetaceans -
MMPA Pinnipeds -

Jonathan (John) Edwards
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Caltrans Environmental M5
703 B Street
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(530) 720-3945 (Work Cell)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Project Code: 2023-0121065
Project Name: Willow Slough Bridge Replacement Project

November 03, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2023-0121065
Project Name: Willow Slough Bridge Replacement Project
Project Type: Bridge - Replacement
Project Description: The proposed project is located on State Route (SR) 99 in Sacramento County, approximately 6 miles north of the Sacramento and San Joaquin County line at Willow Slough Bridge (Br. No. 24-0046 L/R). The project occurs on SR 99 from post mile (PM) 6.4 to 7.06 (figure 1). and within the Galt U.S. Geological Survey 7.5 - minute quadrangle.

The project proposes to replace existing bridge (BR. No. 24-0046L) and close the median gap between the southbound (Br. No. 24-0046L) and northbound (Br. No. 24-0046R) bridges at Willow Slough on SR 99. In addition, this project will upgrade roadway safety by providing standard shoulder width, upgrade Metal Beam Guardrail (MBGR), and install Traffic Management System (TMS).

Construction Sequence

The proposed sequence of construction has been separated into 2 stages. Refer to the outline and diagrams below illustrating the 2 stages.

Stage 1 proposes to construct a right widening and utilize the right widening and about 10 feet of the existing northbound bridge by restriping and placing barriers in preparation for southbound traffic in Stage 2.

Stage 2 In stage 2, the existing southbound bridge will be removed and replaced with a single-span bridge at a higher elevation to match the existing northbound bridge elevation, with no closure pour between the bridges to allow future profile to raise for the left bridge.

Proposed Construction Elements

• Construct temporary pavement for tapers in the southbound direction before and after the bridge to accommodate stage construction.
• Construct access road on both west and east sides of the existing bridges.
• Raise southbound roadway profile to match existing right bridge elevation.
• Remove existing 1’2” widening on the left edge of the right bridge.
• Construct bridge foundation.
• Connect right bridge widening to the existing right bridge structure with a closure pour.
• Place concrete deck on precast slab bridge for the left bridge replacement and
left/right bridge widening.
• Place approach slabs to the left bridge replacement and left/right bridge widening.
• Place concrete median barrier at the center of the proposed bridge.
• Remove and replace existing metal beam guardrail with steel post

Midwest
Guardrail Systems (MGS) and install end treatment as needed.
• Remove existing bridge railing on the left edge of the right bridge.
• Install bridge railing on the left edge of the left bridge replacement.
• Restripe lanes and shoulders with standard 6” thermoplastic traffic stripe.
• Install a 90’ CCTV Pole and a Maintenance Vehicle Pullouts (MVP) on Northbound at PM 6.82.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.33339195,-121.3310337,14z

Counties: Sacramento County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

REPTILES

NAME	STATUS
Giant Garter Snake *Thamnophis gigas* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

FLOWERING PLANTS

NAME	STATUS
Fleshy Owl's-clover *Castilleja campestris ssp. succulenta* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8095	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: California Department of Transportation District 3
Name: Jonathan Edwards
Address: 703 B street
City: Marysville
State: CA
Zip: 95901
Email jonathan.edwards@dot.ca.gov
Phone: 5307203945