

# State Route 116 Bridge Railings Replacement Project



## DRAFT Initial Study with Proposed Negative Declaration

SONOMA COUNTY, CALIFORNIA  
DISTRICT 4 – SON – 116 (PM 19.90-33.37)  
04-2Q420/0419000011

Prepared by the  
State of California, Department of Transportation

June 2023





## General Information about this Document

### What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study with Proposed Negative Declaration (IS/ND) for the State Route (SR) 116 Bridge Railings Replacement Project (Project). Caltrans proposes to upgrade and replace approximately 430 feet of existing bridge railings systems to current Caltrans standards at the Jones Creek Bridge (Bridge Number 20-0094) located at Post Mile (PM) 19.90, Blucher Creek Bridge (Bridge Number 20-0103) located at PM 29.83, and Gossage Creek Bridge (Bridge Number 20-0104) located at PM 33.37 on SR 116 in Sonoma County. Additional Project information is provided in Chapter 2.

Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This IS/ND describes why Caltrans proposes the Project, how the existing environment could be affected by the Project, potential environmental impacts, and the Project features and avoidance and minimization measures that would reduce, avoid and/or minimize Project impacts to a less than significant level.

### What you should do:

- Please read this IS/ND.
- This IS/ND, maps, and Project information are available to download at the [District 4 Environmental Documents by County](https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs) website (<https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs>). In addition, a hard copy of this IS/ND will be made available at the following locations in the vicinity of the Project:
  - Forestville Library  
7050 Covey Road  
Forestville, CA 95436
  - Sebastopol Regional Library  
7140 Bodega Avenue  
Sebastopol, CA 95472
  - Rohnert Park - Cotati Regional Library  
6250 Lynne Condé Way  
Rohnert Park, CA 94928

- We would like to hear what you think. Send comments by the deadline of July 29, 2023, to:
  - Caltrans, District 4  
ATTN: Arnica MacCarthy, Senior Environmental Planner  
P.O. Box 23660, MS-8B  
Oakland, CA 94623-0660; or
  - The Project email address: [son116bridgerailingsreplacement@dot.ca.gov](mailto:son116bridgerailingsreplacement@dot.ca.gov)

### **What happens next:**

Per CEQA Section 15073, Caltrans will circulate this IS/ND for review for 30 days from June 30 to July 29, 2023. During the 30-day public review period, the general public and responsible and trustee agencies can submit comments on this IS/ND to Caltrans. Caltrans will consider the comments and will respond to the comments after the 30-day public review period.

After comments have been received from the general public and responsible and trustee agencies, Caltrans may:

1. Grant environmental approval to the Project.
2. Conduct additional environmental studies.
3. Abandon the Project.

If the Project is granted environmental approval and funding is obtained, Caltrans could design and construct all or part of the Project.

### **Alternative Formats:**

For individuals with sensory disabilities, this IS/ND can be made available in Braille, in large print, on audiocassette, or on computer disk by writing to the Caltrans District 4 mailing or email address or by calling **California Relay Service** at **(800) 735-2929 (TTY)**, **(800) 735-2922 (Voice)**, or **711**.

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## DRAFT Initial Study with Proposed Negative Declaration

**04-SON-116**

**19.90-33.37**

**04-2Q420**

Dist. – Co. – Rte.

PM

E.A.

Project title:	SR 116 Bridge Railings Replacement Project
Lead agency name and address:	California Department of Transportation 111 Grand Avenue, Oakland, CA 94612
Contact person and phone number:	Arnica MacCarthy, Senior Environmental Planner (510) 506-0481
Project location:	Sonoma County
General plan description:	Highway
Zoning:	Transportation Corridor
Other public agencies whose approval is required (e.g., permits, financial approval, or participation agreements)	California Department of Fish and Wildlife California Transportation Commission North Coast Regional Water Quality Control Board U.S. Army Corps of Engineers U.S. Fish and Wildlife Service

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*Maxwell Lammert*

06/13/2023

Maxwell Lammert  
Acting Chief, Office of Environmental Analysis  
California Department of Transportation, District 4

Date

To obtain a copy in Braille, in large print, on audiocassette, or on computer disk, please mail Caltrans, District 4, ATTN: Arnica MacCarthy, Senior Environmental Planner, P.O. Box 23660, MS-8B, Oakland, CA 94623-0660; email [son116bridgerailingsreplacement@dot.ca.gov](mailto:son116bridgerailingsreplacement@dot.ca.gov); or call **California Relay Service** at **(800) 735-2929 (TTY)**, **(800) 735-2922 (Voice)**, or **711**.



# Proposed Negative Declaration

## Project Description

The California Department of Transportation (Caltrans) has prepared this Initial Study with Proposed Negative Declaration (IS/ND) for the State Route (SR) 116 Bridge Railings Replacement Project (Project). Caltrans proposes to upgrade and replace approximately 430 feet of existing bridge railings systems to current Caltrans standards at the Jones Creek Bridge (Bridge Number 20-0094) located at post mile (PM) 19.90, Blucher Creek Bridge (Bridge Number 20-0103) located at PM 29.83, and Gossage Creek Bridge (Bridge Number 20-0104) located at PM 33.37 on SR 116 in Sonoma County. Additional Project information is provided in Chapter 2.

## Determination

This Proposed Negative Declaration (ND) is included to notify the general public, responsible agencies, and trustee agencies that Caltrans intends to adopt a ND for the Project. This ND is subject to change based on comments received from the general public, responsible agencies, and trustee agencies.

Caltrans has prepared this IS/ND for the Project and, pending public review, expects to determine from this study that the Project would not have a significant effect on the environment for the following reasons:

- The Project would have no impacts on agriculture and forest resources, geology and soils, land use and planning, mineral resources, population and housing, public services, and recreation.
- The Project would have less than significant impacts on aesthetics, air quality, biological resources, cultural resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation, Tribal cultural resources, utilities and service systems, and wildfire.

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Christopher Caputo  
Acting Deputy District Director  
Environmental Planning and Engineering  
California Department of Transportation, District 4

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Date





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## List of Abbreviated Terms

<b>Abbreviation</b>	<b>Definition</b>
AASHTO	American Association of State Highway and Transportation Officials
ABAG	Association of Bay Area Governments
ADI	Area of Direct Impact
AMM	avoidance and/or minimization measure
APE	area of potential effects
BIOS	Biogeographic Information and Observation System
BMP	best management practice
BSA	Biological Study Area
CA	California
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCA	California Coastal Act of 1976
CCC steelhead	Central California Coast steelhead
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFS	California freshwater shrimp
CGS	California Geological Survey
CH <sub>4</sub>	methane
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO <sub>2</sub>	carbon dioxide
CO <sub>2e</sub>	carbon dioxide equivalent
COZEEP	Construction Zone Enhanced Enforcement Program

<b>Abbreviation</b>	<b>Definition</b>
CRLF	California red-legged frog
dBA	A-weighted decibel(s)
DNAC	District Native American Coordinator
DP	Director's Policy
DPS	Distinct Population Segment
DTSC	Department of Toxic Substances Control
EA	Expenditure Authorization
EO	Executive Order
ESA	environmentally sensitive area
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
GHG	greenhouse gas
Graton Rancheria	Federated Indians of Graton Rancheria
GWP	global warming potential
IS/ND	Initial Study/Negative Declaration
L <sub>max</sub>	maximum hourly noise level
MASH	Manual for Assessing Safety Hardware
MBGR	metal beam guardrail
MGS	Midwest Guardrail System
MLD	Most Likely Descendent
MRZ	Mineral Resource Zone
MTC	Metropolitan Transportation Commission
N/A	not applicable
N <sub>2</sub> O	nitrous oxide
NAHC	Native American Heritage Commission

<b>Abbreviation</b>	<b>Definition</b>
ND	Negative Declaration
NESMI	Natural Environment Study Minimal Impact
NIS	New impervious surface
NMFS	National Marine Fisheries Service
NNI	net new impervious
NOAA	National Oceanographic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OCRS	Office of Cultural Resources Studies
OHWM	Ordinary high-water mark
PA	Programmatic Agreement
PF	project feature
PG&E	Pacific Gas and Electric Company
PM	post mile
PM <sub>10</sub>	particulate matter with aerodynamic diameter equal to or less than 10 micrometers
PM <sub>2.5</sub>	particulate matter with aerodynamic diameter equal to or less than 2.5 micrometers
PQS	Professionally Qualified Staff
PS&E	plans, specifications, and estimates
RCEM	Road Construction Emissions Model
RIS	replaced impervious surface
ROW	right of way
RWQCB	Regional Water Quality Control Board
SCTA	Sonoma County Transportation Authority
SHOPP	State Highway Operation and Protection Program
SLF	Sacred Lands File
SR	State Route

<b>Abbreviation</b>	<b>Definition</b>
SSC	Species of Special Concern
SSP	Standard Special Provision
SWRCB	State Water Resources Control Board
TCDS	temporary creek diversion system
TCE	temporary construction easement
THPO	Tribal Historic Preservation Officer
TMP	Traffic Management Plan
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VMT	vehicle miles traveled
WEF	wildlife exclusion fencing
WPCP	Water Pollution Control Program
WPT	western pond turtle

# Chapter 1 Proposed Project

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## 1.1 Introduction

The California Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA) for the State Route (SR) 116 Bridge Railings Replacement Project (Project) and has prepared this Initial Study with Proposed Negative Declaration (IS/ND). Jones Creek Bridge (Bridge Number 20-0094), Blucher Creek Bridge (Bridge Number 20-0103), and Gossage Creek Bridge (Bridge Number 20-0104) are located on SR 116 at Post Mile (PM) 19.90, 29.83, and 33.37, respectively, in Sonoma County, California (Figures 1-1 and 1-2 in Appendix A). The Project would occur along SR 116 between PM 19.90, near the community of Forestville, and PM 33.37, near the unincorporated city of Cotati, just west of Santa Rosa, in Sonoma County.

Caltrans proposes to upgrade and replace approximately 430 feet of existing bridge railings systems to current Caltrans standards at three bridges on SR 116 (Figure 1-3 in Appendix A). At all three bridges, Midwest Guardrail System (MGS) would be installed and connected to the new bridge rail systems on both the approach and departure ends of the bridges. The approximately 13.5-mile stretch along SR 116 is referred to hereafter as the Project corridor.

The Project would be funded by the State Highway Operation and Protection Program (SHOPP) under Program Code 201.112 (Bridge Rail Replacement/Upgrade) for the 2023/2024 fiscal year. The SHOPP Program is California's "fix-it-first" program, which funds the repair and preservation of the State Highway System, safety improvements, and some highway operational improvements. The Project total cost estimate, including capital and support costs, is \$9,950,000.

## 1.2 Purpose and Need

The purpose of the proposed Project is to upgrade the bridge railing systems at all three locations to current Caltrans standards and to comply with the Federal Highway Administration (FHWA) Manual for Assessing Safety Hardware (MASH) (AASHTO 2012) compliant barrier requirements.

The Project is needed to meet current bridge railing safety standards. The three bridges are all between 85 and 102 years old, and rail conditions at the Gossage Creek Bridge are classified as poor. Modern vehicles travel at higher speeds and are heavier

and taller than those from the time the bridges were constructed; therefore, the bridge railings at these three locations need to be upgraded.

### 1.3 Existing Conditions

Within the Project corridor, SR 116 is a two-lane conventional highway that serves as a primary route for communities, tourism, and agricultural areas located along the Russian River Valley. The existing SR 116 roadway consists of two 11-foot-wide to 12-foot-wide lanes with shoulders ranging from 3 feet to 12 feet wide depending on location.

The Jones Creek Bridge (built in 1921, widened in 1956) is a single-span reinforced concrete T-girder structure with a concrete deck supported by diaphragm-type abutments. The bridge is 25.0 feet long and 32.3 feet wide, with the roadway consisting of two 11-foot-wide lanes with 3-foot-wide shoulders in both directions.

The Blucher Creek Bridge (built in 1938) consists of a triple-cell 10-foot by 8-foot concrete box culvert with straight walls stepped down on each end. The existing bridge is 36.0 feet long and approximately 39.5 feet wide. The roadway consists of two 12-foot-wide lanes with a 7-foot-wide shoulder in the westbound direction and a 5-foot-wide shoulder in the eastbound direction.

The Gossage Creek Bridge (built in 1936) consists of a triple-cell 8-foot by 6-foot concrete box culvert with wing walls upstream and straight walls downstream. Wing walls are vertical concrete slabs that extend at an angle out from the bridge. The existing bridge is 48.0 feet long and 49.8 feet wide. The roadway has two 12-foot-wide lanes with a shared 12-foot center left-turn lane for both the eastbound and westbound directions. The shoulder width of the bridge is approximately 12 feet in both directions.

Current guardrail systems at all three locations include metal beam guardrail (MBGR) ranging from 85 feet to 140 feet in length. The Jones Creek and Blucher Creek bridges include both side and top-mounted MBGR located on existing concrete curb structures, while the Gossage Creek Bridge includes timber posts with MBGR and chain-link fencing. The existing bridge approach railing at all three bridges consists of MBGR, in addition to the applicable end-treatment system (Table 1-1).



**Table 1-1. Existing Conditions**

<b>Structure</b>	<b>Bridge No.</b>	<b>Post Mile</b>	<b>Lane Width (feet)</b>	<b>Shoulder Width (feet)</b>	<b>Structure Length (feet)</b>	<b>Structure Width (feet)</b>	<b>Bridge Railing Type</b>
Jones Creek Bridge	20-0094	19.90	11	3	25	32.3	MBGR
Blucher Creek Bridge	20-0103	29.83	12	5 (westbound) 7 (eastbound)	36	39.5	MBGR
Gossage Creek Bridge	20-0104	33.37	12	12	48	49.8	MBGR



# **Chapter 2** Project Description

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## **2.1 Introduction**

Caltrans proposes to replace and upgrade bridge railings at three locations: Jones Creek Bridge (PM 19.90), Blucher Creek Bridge (PM 29.83), and Gossage Creek Bridge (PM 33.37), along SR 116 (Figures 1-1 through 1-3). In addition to the rail replacement work, the Project would also include removing and replacing one culvert and cleaning out another culvert at Jones Creek Bridge and widening Blucher Creek Bridge by 1.5 feet on either side. The Project footprint would encompass the maximum extent of construction-related activities, including staging and disturbed areas, and would be approximately 1.18 acres (Figure 1-3).

## **2.2 Project Components**

This section discusses Project components for each bridge that would be constructed as part of the Project (Jones Creek Bridge: Figure 1-3, mapbook page 1 of 3 in Appendix A; Blucher Creek Bride: Figure 1-3, mapbook page 2 of 3 in Appendix A; and Gossage Creek Bridge: Figure 1-3, mapbook page 3 of 3 in Appendix A).

Table 2-1 summarizes the proposed Project components at each bridge.

### **2.2.1 Culvert Maintenance**

At the Jones Creek Bridge, an existing 24-inch corrugated steel pipe culvert would be removed and replaced in kind south of the westbound lane of SR 116. An existing reinforced concrete pipe culvert would be cleaned out to improve flow to the creek from a ditch in the eastbound lane of SR 116.

### **2.2.2 Upgrade Bridge Railings**

The Jones Creek Bridge and Blucher Creek Bridge would be upgraded with see-through concrete barriers with tubular handrailing. The Gossage Creek Bridge would be upgraded with Type 60M concrete barriers south of the eastbound lane of SR 116 and see-through concrete barriers with tubular handrailing north of the westbound lane.

### **2.2.3 Widen Blucher Creek Bridge**

The Project would widen the Blucher Creek Bridge approximately 1.5 feet on each side (for a total of 3 feet) to accommodate the updated bridge railings and to comply with the design and installation standards outlined in the AASHTO MASH. Widening the bridge would avoid narrowing the SR 116 travel lanes and would accommodate

upgrading the bridge railings. The widening of the bridge would require minor adjustments to the existing wing walls, and no substructure work in the creek would be necessary.

**Table 2-1. Proposed Conditions**

Structure	Bridge No.	Post Mile	Lane Width (feet)	Shoulder Width (feet)	Structure Length (feet)	Structure Width (feet)	Widening (feet)	Bridge Railing Type
Jones Creek Bridge	20-0094	19.90	11	3.42	30	32.33	0	See-through concrete barriers with tubular handrailing
Blucher Creek Bridge	20-0103	29.83	12	7 (eastbound) 8 (westbound)	27	42.5	1.5 (eastbound) 1.5 (westbound)	See-through concrete barriers with tubular handrailing
Gossage Creek Bridge	20-0104	33.37	12	12	34	49.83	0	Type 60M concrete barriers (eastbound) See-through concrete barriers with tubular handrailing (westbound)

**2.2.4 Remove Metal Beam Guardrail and Install Midwest Guardrail System**

The Project would remove MBGR and alternative flared terminal systems at the bridge approach and departure sections and would install MGS. The MGS would consist of either wood or steel posts, wood blocks, steel guardrails, and alternative in-line terminal systems. The design would be finalized during the plans, specifications, and estimates (PS&E) phase.

**2.2.5 Construct Concrete Anchor Blocks**

Concrete anchor blocks would be constructed within previously disturbed areas at all three bridges to provide a transition element between the upgraded bridge railings and the MGS to be installed. The design would be finalized during the PS&E phase.

### **2.2.6 Install Vegetation Control**

Vegetation control would be installed at the bridges in conjunction with the MGS. Fiber/rubber matting, gravel, and/or asphalt concrete pavement may be used as vegetation control.

### **2.2.7 Temporary Creek Diversion Systems**

At all three bridges, a temporary creek diversion system (TCDS) would be installed to dewater the Project area for construction and allow flow to continue along the same alignment as its pre-construction condition. The TCDS would consist of a cofferdam on either side of the Project work area and a system of pipes to convey creek water from behind the upstream cofferdam to below the downstream cofferdam.

## **2.3 Construction Methodologies**

This section discusses the anticipated methodology for construction staging, schedule, construction-related equipment, utilities, and right of way (ROW) for the Project.

### **2.3.1 Construction Staging**

Prior to the beginning of ground-disturbing activities at the bridges, which would occur in previously disturbed areas, construction area signs, environmentally sensitive area (ESA) fencing, and best management practices (BMPs) would be installed. Ground-disturbing activities are not anticipated to occur in previously undisturbed areas. Temporary debris catchment systems would be installed to contain and prevent demolition and construction debris from entering the creeks below each bridge. Temporary work platforms would be placed below the bridge deck overhangs.

To maintain the use of SR 116 for the traveling public, the bridge railings would be upgraded one lane at a time. One-way alternating traffic control would keep the other lane open to the traveling public in both directions throughout construction.

The ground-disturbing portions of the Project are anticipated to be constructed in three stages. The first stage would include closing the lane adjacent to the bridge railing being upgraded and installing temporary barrier systems and temporary crash cushions along the centerline of SR 116. Staging areas at the Gossage Creek Bridge and Blucher Creek Bridge would occur within Caltrans ROW for the overnight storage of equipment and materials. The staging area at the Jones Creek Bridge would occur outside of Caltrans ROW and require a temporary construction easement (TCE).

The second stage would include clearing and grubbing vegetation, although no tree removal is anticipated. At all three bridges, a TCDS would be installed. The bridge railings, MBGR, and alternative flared terminal systems adjacent to the lane closed to traffic in both directions would be removed. At all three bridges, the bridge railings would be upgraded, concrete anchor blocks would be constructed, and MGS and vegetation control would be installed. At the Jones Creek Bridge, the culvert north of the westbound lane of SR 116 would be removed and replaced in kind and the culvert south of the eastbound lane of SR 116 would be cleaned. At the Blucher Creek Bridge, the shoulder widening would be constructed to complement the bridge widening. This construction methodology would then be repeated on the other side of SR 116, with the previously closed lane reopened.

The third stage would include the following:

- Removing construction-related items
  - Temporary work platforms placed below the bridge deck overhangs
  - Temporary debris catchment systems
  - BMPs
  - ESA fencing
  - TCDSs
  - Construction area signs
  - Temporary barrier systems along the centerline of SR 116 and along the approach sections
  - Temporary crash cushions
- Restriping
- Reopening both lanes to the traveling public

Construction would be completed from the decks of the existing Blucher and Gossage Creek bridges. At the Jones Creek Bridge, inadequate deck space is available to suspend a temporary containment system or suspended falsework/shoring system; bridge construction may require a falsework system to be installed on the creek

bottom or require support from wingwalls. The falsework system would consist of wood or steel posts supported by timber or concrete pads placed on the creek bottom. The posts would support the forming system required to construct the new bridge rail system. Full creek bottom access may be required for temporary supports and foot traffic.

### **2.3.2 Construction Schedule**

Construction is anticipated to occur at two bridges at a time with construction crews working simultaneously on different bridges. Construction-related activities would not be limited to daytime hours, as some nighttime work is anticipated. Prior to ground-disturbing activities, the Project would develop temporary BMPs in compliance with Caltrans Standard Specification 13-3.01C(3) and develop and deploy appropriate BMPs consistent with the Rain Event Action Plan at least 48 hours in advance of a forecasted storm that has a 50 percent probability of rainfall within 72 hours.

Construction is anticipated to take approximately 8 to 12 months, or two construction seasons, to complete. The Project would require approximately 180 working days and occur between January 2025 and September 2026.

### **2.3.3 Construction Equipment**

Equipment may include, but would not be limited to, a utility truck, back hoes, excavators, cranes, dump truck, jack hammers, saw cutters, generators, vacuums, water trucks, street sweepers, air compressors, asphalt pavers, augers, compactors, pile drivers, concrete pumps, hydraulic pumps, and scaffolding.

### **2.3.4 Utilities**

The Project is anticipated to require relocation of an existing fire hydrant at the northwestern corner of the Jones Creek Bridge to accommodate the new MGS. Utility verification (that is, potholing) would occur during the PS&E phase to confirm the need for utility relocations, and if needed, utility relocations would occur prior to the beginning of construction and in consultation with utility providers (for example, Pacific Gas and Electric Company, AT&T, and Verizon).

### **2.3.5 Right of Way**

Some construction-related activities for the Jones Creek bridges would occur outside of the Caltrans ROW. The Project would require ROW acquisition for the purposes of TCEs (Table 2-2). TCEs would be finalized during the PS&E phase. No construction-

related activities outside of Caltrans ROW are anticipated at the Blucher Creek Bridge.

**Table 2-2. Right of Way Acquisition**

Location	Sonoma County Assessor Parcel Number	Easement Type	Approximate Size (acre)
Jones Creek Bridge	084-010-004	TCE	0.07
Jones Creek Bridge	084-020-006	TCE	0.01
Jones Creek Bridge	084-020-024	TCE	0.004
Gossage Creek Bridge	N/A	TCE	0.001

Source: Sonoma County 2023

Note: N/A = not applicable

## 2.4 Permits, Licenses, Agreements, Certifications, and Approvals Required

Table 2-3 lists the permits, licenses, agreements, and certifications that are anticipated to be required for Project construction.

**Table 2-3. Permits, Licenses, Agreements, Certifications, and Approvals Required**

Agency	Permits, Licenses, Agreements, Certifications, and/or Approval	Status
California Department of Fish and Wildlife (CDFW)	Section 1602 Lake and Streambed Alteration Agreement	Application to be submitted during the PS&E phase
North Coast Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification	Application to be submitted during the PS&E phase
U.S. Army Corps of Engineers (USACE)	Section 404 Permit	Application to be submitted during the PS&E phase
U.S. Fish and Wildlife Service (USFWS)	Biological Opinion	Targeting to receive by January 1, 2024



# Chapter 3 California Environmental Quality Act Evaluation

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The following discussions evaluate potential environmental impacts related to the CEQA checklist to comply with state CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3, Section 15091). The analysis considers potential environmental impacts of the Project as discussed in Chapter 2.

## 3.1 Environmental Factors Potentially Affected

As part of the scoping and environmental analysis carried out for the Project, the following environmental factors were considered, but no impacts were identified: agriculture and forest resources, geology and soils, land use planning, mineral resources, population and housing, public services, and recreation. The environmental factors checked below would be potentially impacted by the Project. Further analysis of these environmental factors is provided in this chapter.

X	Aesthetics		Agriculture and Forestry	X	Air Quality
X	Biological Resources	X	Cultural Resources	X	Energy
	Geology/Soils	X	Greenhouse Gas Emissions	X	Hazards and Hazardous Materials
X	Hydrology/Water Quality		Land Use/Planning		Mineral Resources
X	Noise		Population/Housing		Public Services
	Recreation	X	Transportation/Traffic	X	Tribal Cultural Resources
X	Utilities/Service Systems	X	Wildfire	X	Mandatory Findings of Significance

### 3.2 Determination

On the basis of this initial evaluation:

X	I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
	I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	
	I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
	I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
	I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.	
<b>Signature:</b>		<b>Date:</b>
<i>Maxwell Lammert</i>		06/13/2023
<b>Printed Name: Maxwell Lammert</b>		<b>For:</b>

### 3.3 CEQA Environmental Checklist

The CEQA Environmental Checklist identifies physical, biological, social, and economic factors that might be affected by the Project. In many cases, background studies performed in connection with projects will indicate that there are no impacts to a particular resource. A “No Impact” answer in the CEQA Determination column of the impact summary tables at the beginning of each resource category section in this chapter reflects this determination. The words "significant" and "significance" used throughout this IS/ND are related to CEQA, not National Environmental Policy Act, impacts. The questions in each impact summary table are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features (PFs) are measures incorporated into Caltrans projects to reduce environmental impacts that can include both design components of the Project and standardized measures that are applied to most, if not all Caltrans projects, such as construction site BMPs and measures included in the Caltrans Standard Plans and Standard Specifications or as Standard Special Provisions (SSPs), and are considered to be an integral part of the Project and have been considered prior to any significance determinations documented in this chapter. Avoidance and minimization measures (AMMs) are additional measures to avoid and/or minimize a project’s environmental impacts but are more specifically tailored to a given project’s particular impacts. The project features and AMMs incorporated into the Project are described in this chapter and are compiled in Appendix C.

Sections 3.3.1 through 3.3.20 present the CEQA determinations under Appendix G of the CEQA Guidelines. The CEQA determinations depend on the level of potential environmental impact that would result from the Project. The level of significance determinations is defined as follows:

- **No Impact:** Indicates no physical environmental change from existing conditions.
- **Less Than Significant Impact:** Indicates the potential for an environmental impact that is not significant with or without the implementation of project features/AMMs.
- **Less Than Significant Impact with Mitigation Incorporated:** Indicates the potential for a significant environmental impact that would be mitigated with the implementation of mitigation measures to a level of less than significant.

- Potentially Significant Impact: Indicates the potential for a significant and unavoidable environmental impact.

### 3.3.1 Aesthetics

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

Question	CEQA Determination
a) Have a substantial adverse effect on a scenic vista?	Less Than Significant Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Less Than Significant Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR AESTHETICS

A *Visual Impact Assessment and Scenic Resources Evaluation* memorandum (Caltrans 2022a) was prepared by Caltrans for the Project, and a summary of the findings is presented in this section.

Within the Project corridor, SR 116 is a two-lane conventional highway that serves as a primary route for communities, tourism, and agricultural areas located along the Russian River Valley. The existing SR 116 roadway consists of two 11-foot-wide to 12-foot-wide lanes with shoulders ranging from 1 foot to 8 feet wide depending on location (Caltrans 2022a). Overall, the landscape is characterized by grassy plains and agricultural fields, with dense stands of trees. The land use within the corridor or Project corridor is primarily rural agricultural but also includes areas of rural residential and industrial uses.

The Jones Creek Bridge is located at PM 19.90 within Forestville in Sonoma County, California. The roadway is a two-lane conventional highway with narrow shoulders. Driveways adjacent to the Project briefly interrupt the vegetation but generally are visually consistent with this portion of the highway corridor. Mature deciduous trees arch over the roadway visually enclosing the highway. The mature trees lining the roadway also screen the private properties within the Project area. Brief views of the vegetative agricultural fields and vineyards can also be seen when traveling through the corridor. This section of the Project corridor is officially designated as a State Scenic Highway.

The Blucher Creek Bridge is located at PM 29.83 within Sebastopol in Sonoma County, California. The location is rural. The roadway is a two-lane conventional highway with 7-foot-wide to 8-foot-wide shoulders. The landscape north of the roadway is characterized by dense deciduous trees that create a vegetative screen that blocks views of the industrial yard and agricultural field in the background. South of the roadway dense mature trees allow brief views of Blucher Creek. This section of the Project corridor is eligible as a State Scenic Highway.

The Gossage Creek Bridge is located at PM 33.37 within Cotati in Sonoma County, California. This location is rural agricultural with pockets of residential areas and an industrial yard northeast of the Project area. Looking south of the highway, views of grassy plains are interrupted by riparian trees that line the creek in the foreground and midground. Grassy hills with scattered trees make up the background to create a highly scenic view. This section of the Project corridor is eligible as a State Scenic Highway.

The Project would comply with Director's Policy (DP) 22, *Context Sensitive Solutions* (Caltrans 2001). The solutions set forth in DP 22 use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. The Guidelines and DP 22 include the use of project components that contribute to visual consistency and continuity, and constructed features that are visually appropriate to the area. The Project components reflect the recognition of the importance of the visual quality of the highway and are reflected in the early-stage design of the Project. Context-sensitive Project components would be finalized during the design phase and in consultation with regulatory agencies.

Implementation of the project features and AMMs presented at the end of this section would limit impacts to vegetation and other visual resources.

**a, b, and d) Less Than Significant Impact**

The Project would not adversely affect any Designated Scenic Resource (such as a rock outcropping, tree grouping, or historic property) as defined by CEQA statues or guidelines, or by Caltrans policies. Existing vegetation removal is expected to be minimal, and no adverse visual impacts are anticipated. Existing scenic vistas are expected to remain as per current conditions. The Project components would not substantially affect the appearance of the highway corridor and would be visually

consistent with the character of the surrounding area. There would be a less than significant impact.

The Project would not result in new substantial light or glare that would adversely affect nighttime views. Construction lighting would be limited to the Project footprints for construction-related activities, and light trespass to adjacent residences and to the traveling public would be minimized with the use of directional lighting, shielding, and other measures as needed. There would be a less than significant impact.

Tree removal is not currently anticipated. In the unlikely event that tree removal would become necessary, tree removal/replacement ratios would be finalized during the design phase and in consultation with permitting agencies. Planting that may be required would only serve to further minimize changes to the visual environment. Seeding with a commercially available, locally appropriate native seed mix, applied to all areas of disturbed soil, would be needed. The visual nature of the planting would be consistent with the surrounding native vegetation as it existed pre-construction. Post-construction seeding with a commercially available, locally appropriate native seed mix, would help ensure that native plants are quickly reestablished, thereby largely and quickly erasing the minor and temporary visual impacts of the Project.

The Project, with implementation of the listed project features and AMMs, would result in low to moderate visual impacts. The dominance of the views beyond the highway would remain and would not be degraded by Project construction. Post-construction seeding would minimize the appearance of disturbance and any additional planting, if determined to be necessary, would further minimize visual impacts. Impacts to scenic resources in the Project corridor would be less than significant.

**c) No Impact**

The Project would not conflict with applicable zoning and other regulations governing scenic quality; therefore, there would be no impact.

**PROJECT FEATURES**

Caltrans would incorporate the following project features into the Project to reduce potential impacts to visual resources:

- **PF-AES-1: Construction Equipment and Material Storage.** Construction equipment and materials should be stored in screened staging areas beyond the direct view of the traveling public to the extent feasible.
- **PF-AES-2: Nightwork.** For nightwork, limit construction lighting to the Project footprint for construction-related activities, and use directional lighting, shielding, and other measures as needed to minimize light trespass to the traveling public.
- **PF-AES-3: Vegetation Impacts and Protection.** Reduce impacts to vegetation to the greatest extent possible while allowing the Project to be implemented. Vegetation to remain should be protected from construction activities by temporary fencing when vegetation is close to construction-related activities.
- **PF-AES-4: Temporary Fencing.** Use temporary fencing to protect the roots and canopies of nearby trees from construction-related activities.
- **PF-AES-5: Revegetate Disturbed Areas.** Revegetate disturbed areas with regionally appropriate, commercially available, native seed mix.

#### **AVOIDANCE AND MINIMIZATION MEASURES**

Caltrans would incorporate the following AMMs into the Project to avoid and/or minimize potential impacts to visual resources:

- **AMM-AES-1: Appearance of Construction Materials.** Minimize appearance of construction equipment and staging areas.
- **AMM-AES-2: Unavoidable Removal of Trees.** Although tree removal is not currently anticipated, if construction work results in the unavoidable removal of existing trees of a diameter breast height (caliper size) of 4 inches or greater, replant trees within the Project limits with native and climatically appropriate species to the extent practicable; provide a minimum of three years of planting establishment for replanted trees.
- **AMM-AES-3: Certified Arborist.** Any pruning of trees must be done under the supervision of a certified arborist to accommodate construction access to the maximum extent practicable, prior to considering any tree removal.
- **AMM-AES-4: Native Topsoil.** Stockpile and re-use native topsoil to the maximum extent practicable, to assist in revegetation success and re-establish native plants present in the native soil.



**3.3.2 Agriculture and Forest Resources**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:

Question	CEQA Determination
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact

**CEQA SIGNIFICANCE DETERMINATIONS FOR AGRICULTURE AND FOREST RESOURCES**

The Project is located along previously disturbed portions of SR 116 (Figure 1-3). The Project footprint is not located within any forestland or timberland, nor is it located within any Sonoma County Parcels which are under a Williamson Act Contract (California Department of Conservation 2016, 2019).

**a, b, c, d, and e) No Impact**

The Project would not affect agricultural land, would not convert farmland to a non-agricultural use, and is not located within any Sonoma County assessor's parcel numbers under a Williamson Act Contract. The Project would not conflict with existing zoning for forest land or timberland, or convert forest land to non-forest use land, as there are no forest lands or timberlands within the Project footprints. The Project would not have changes in the existing environment that would result in conversion of forest or agricultural land. Therefore, there would be no impact.

### 3.3.3 Air Quality

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

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non- attainment under an applicable federal or state ambient air quality standard?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR AIR QUALITY

The Project is located in Sonoma County within the San Francisco Bay Area Air Basin under the jurisdiction of the Bay Area Air Quality Management District. Sonoma County is designated as nonattainment for ozone and particulate matter with aerodynamic diameter equal to or less than 2.5 micrometers (PM<sub>2.5</sub>) under national ambient air quality standards (U.S. Environmental Protection Agency [USEPA] 2022), and nonattainment for ozone, PM<sub>2.5</sub>, and particulate matter with aerodynamic diameter equal to or less than 10 micrometers (PM<sub>10</sub>) under state air quality standards (CARB 2019). The county is in attainment or unclassified for other federal and state air quality standards.

#### a) No Impact

The Project would have temporary construction emissions and construction-related activities and would comply with state and local regulations and policies. Emission reduction measures would be implemented as discussed under PF-AQ-1 through PF-AQ-3 (presented at the end of this section) to reduce construction emissions. The Project would not affect vehicle operation on SR 116 or nearby roadways when construction is complete. Long-term emission increases and adverse impacts from the Project are not anticipated. Therefore, the Project would not conflict with the region’s air quality plans and there would be no impact.

**b, c, and d) Less Than Significant Impact**

The proposed Project would not alter characteristics of SR 116 or local roadways, increase SR 116 transportation capacity, or change the horizontal or vertical alignments of SR 116.

Construction-generated air pollutants are expected to be short-term. Construction-generated air pollutants include emissions resulting from material processing by onsite construction equipment, workers commuting to and from the Project, and traffic delays due to construction. The emissions would be produced at different rates throughout the Project depending on the construction-related activities occurring at that time. Potential impacts to air quality, including emissions of air pollutants, odors affecting nearby sensitive receptors, and exposure of sensitive receptors to pollutants, would be less than significant based on the temporary nature of the Project construction-related activities.

During construction, the Project would comply with Caltrans Standard Specification 14-9, Air Quality, which requires compliance with applicable air-pollution control rules, regulations, ordinances, and statutes. In addition, the Project would implement the construction site BMPs described in PF-AQ-1 through PF-AQ-3 to further reduce air quality impacts.

The Project would have no long-term impacts on air quality and temporary construction-related impacts would be less than significant.

**PROJECT FEATURES**

Caltrans would incorporate the following standard project features into the Project to reduce potential impacts to air quality:

- **PF-AQ-1: Dust Control Measures.** Implement dust control measures to minimize airborne dust and soil particles generated from construction-related activities, including watering or applying dust palliative to disturbed areas, preventing and promptly removing trackouts on SR 116 and other public roadways affected by construction traffic, and covering soils or construction materials or providing adequate freeboard (space from the top of the material to the top of the truck) during transport.

- **PF-AQ-2: Construction Vehicles and Equipment.** Maintain and tune the construction vehicles and equipment in accordance with manufacturer's specifications.
- **PF-AQ-3: Limit Idling.** Limit idling times either by shutting construction equipment off when not in use or reducing the maximum idling time to 5 minutes.

### 3.3.4 Biological Resources

Would the Project:

Question	CEQA Determination
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 or U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less Than Significant Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Less Than Significant Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less Than Significant Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR BIOLOGICAL RESOURCES

A Natural Environmental Study was prepared to evaluate the effects of the Project on biological resources, including sensitive plants and wildlife species (Caltrans 2023a), and is summarized here.

The Biological Study Area (BSA) encompasses the Project footprints and areas immediately adjacent to the three bridges. The BSA is approximately 2.10 acres, encompassing primarily roadside shoulders dominated by ruderal species, with developed, landscaped, and agricultural areas such as vineyards along either side of SR 116. Riparian habitat occurring within the banks of all three creeks totals 0.70 acre within the BSA. The BSA contains one wetland within the Jones Creek BSA, along the southern bank.

A regional list of special-status wildlife and plant species was compiled using databases to evaluate the Project’s potential impacts to sensitive biological resources. The database search included the California Natural Diversity Database (CNDDB) (CDFW 2023a), the U.S. Fish and Wildlife Service (USFWS) Information for

Planning and Consultation Database (USFWS 2023), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2023), and the National Marine Fisheries Service (NMFS) database (NMFS 2023). The special-status plant and animal species on the regional lists were evaluated to determine their potential to occur within the Project area.

**a) Less Than Significant Impact**

With implementation of project features and AMMs as summarized in Appendix C, the Project would have a less than significant impact, either directly or through habitat modification, on any identified candidate, sensitive, or special- status species in local or regional plans, policies, or regulations, or by CDFW, USFWS, or NMFS.

The following sections discuss special-status species potentially present within or adjacent to the approximately 2.10-acre BSA.

***Animals***

**California Red-Legged Frog:** The California red-legged frog (*Rana draytonii*; CRLF) is a federally threatened species and a California Species of Special Concern (SSC). The Project is located outside of CRLF critical habitat and any designated CRLF recovery units. Suitable breeding habitat was identified within the BSA for Gossage Creek (downstream of the bridge) but not within the Project footprint, and would not be impacted by construction. The Project area has the potential to provide both upland and aquatic dispersal habitat in the wet season due to their proximity to the Laguna de Santa Rosa and Green Valley Creek and their tributaries, which have the potential to serve as breeding areas for CRLF. The Project is located within its current known range and there are eight CNDDDB occurrences within a 5-mile radius of the approximately 2.10-acre BSA. However, the land between the Project site and the CNDDDB occurrences is largely rural residential, with many roads that likely constitute barriers to dispersal.

Potential Project impacts include temporary loss of habitat during construction and potential loss of individuals during vegetation removal, removal of MBGR and installation of MGS, and installation and removal of temporary work platforms, TCDSs, and debris catchment systems. The removal of MBGR and installation of MGS would permanently impact approximately 0.03 acre of upland dispersal habitat. However, impacts to suitable upland dispersal habitat during and immediately after

construction are not anticipated to affect the upland dispersal habitat's long-term suitability to support CRLF.

Implementation of PF-BIO-1 through PF-BIO-4, PF-BIO-6 through PF-BIO-10, PF-BIO-12, and AMM-BIO-2 through AMM-BIO-5, as summarized in Appendix C, would reduce, avoid, or minimize impacts to CRLF and its habitat. The impact would be less than significant.

**Central California Coast (CCC) Steelhead:** The CCC Distinct Population Segment (DPS) of steelhead (*Oncorhynchus mykiss*) (CCC steelhead) is a federally threatened species. CCC steelhead consists of all steelhead runs from the Russian River in Sonoma County south to Aptos Creek in Santa Cruz County and includes all steelhead spawning in streams that flow into the San Francisco Bay. No designated critical habitat for CCC steelhead occurs within the BSA; however, downstream tributaries including both Green Valley Creek (downstream of Jones Creek) and portions of Laguna de Santa Rosa (downstream of both Blucher and Gossage Creeks) are designated as critical habitat for this species.

There are two CNDDDB occurrences within a 5-mile radius of the BSA, including within tributary streams of Green Valley Creek and Laguna de Santa Rosa. Suitable stream habitat is present within the Jones Creek and Blucher Creek locations, but significant downstream barriers are present at Gossage Creek. Work would mostly be contained to the bridge deck and shoulders, with no work occurring within the bed or banks outside of temporary access to Jones Creek. While only temporary impacts are expected to steelhead habitat at Jones Creek from TCDS and temporary access, individual steelhead would need to be relocated if encountered during dewatering. All three creek locations are included in the coho salmon intrinsic potential data set (CDFW 2022; Agrawal et al. 2005).

Construction-related activities would not occur within Gossage Creek or Blucher Creek, but temporary access and creek diversion would be required at Jones Creek. Temporary debris catchment systems would be installed to contain and prevent demolition and construction debris from entering Gossage Creek below the Gossage Creek Bridge and Blucher Creek below the Blucher Creek Bridge. The Project would have no direct impacts to CCC steelhead during construction at these two locations. Construction at the Jones Creek Bridge would require temporary access within Jones Creek to install a TCDS and temporary work platforms within the creek bed. A relocation plan would be required during operation of the temporary stream diversion

within Jones Creek. All ground-disturbing activities would be restricted to the dry season (that is, between June 1 and October 31) to further reduce impacts to CCC steelhead.

Implementation of PF-BIO-1, PF-BIO-2, PF-BIO-4, PF-BIO-6 through PF-BIO-10, PF-BIO-12, AMM-BIO-9, and AMM-BIO-10, as summarized in Appendix C, as well as installation of temporary debris catchment systems, would reduce, avoid, or minimize impacts to CCC steelhead and its habitat. The impact would be less than significant.

**Coho Salmon:** The coho salmon (CCC Evolutionarily Significant Unit) (*Oncorhynchus kisutch*) is a federally and state listed endangered anadromous fish species. The Russian River, Mark West Creek, and Laguna de Santa Rosa and its tributaries are designated as critical habitat for coho salmon under the 2009 federal designation with the Russian River watershed continuing to support small runs of this species.

There are two CNDDDB occurrences within a 5-mile radius of the BSA, including within Green Valley Creek downstream of the Jones Creek Bridge and within the Russian River. No suitable spawning habitat is present within the BSA, but upstream migration along Blucher Creek and Jones Creek is possible. Significant barriers to dispersal are present at both Blucher and Gossage creeks in the form of concrete lining and steep upstream embankments. Work would mostly be contained to the bridge deck and shoulders, with no work occurring within the bed or banks outside of temporary access to Jones Creek. While only temporary impacts are expected to coho habitats at Jones Creek from TCDS and temporary access, individual coho would need to be relocated if encountered during dewatering.

Construction-related activities would not occur within Gossage Creek or Blucher Creek, but temporary access and creek diversion would be required at Jones Creek. Temporary debris catchment systems would be installed to contain and prevent demolition and construction debris from entering Gossage Creek below the Gossage Creek Bridge and Blucher Creek below the Blucher Creek Bridge. The Project would have no direct impacts to coho salmon during construction at these two locations. Construction at the Jones Creek Bridge would require temporary access within Jones Creek to install a temporary stream diversion and temporary work platforms within the creek bed. A relocation plan would be required during operation of the temporary stream diversion within Jones Creek. All ground-disturbing activities would be



restricted to the dry season (that is, between June 1 and October 31) to further reduce impacts to coho salmon.

Implementation of PF-BIO-1, PF-BIO-2, PF-BIO-4, PF-BIO-6 through PF-BIO-10, PF-BIO-12, AMM-BIO-9, and AMM-BIO-10, as summarized in Appendix C, as well as installation of temporary debris catchment systems, would reduce, avoid, or minimize impacts to coho salmon and its habitat. The impact would be less than significant.

**Roosting Bats:** Several species of bats, both common and special status, are known to occur or have the potential to occur within the vicinity of the BSA. Based on queried CNDDDB occurrence data, special-status species including Pallid bat (*Antrozous pallidus*) and Western red bat (*Lasiurus blossevillii*) have been observed within 5 miles of the BSA. These species are both considered CDFW SSCs.

No specific habitat assessment was performed within the BSA; however, based on habitat requirements and poor tolerance to roadside noise, it was determined that none of the listed special-status bat species is expected to occur within the BSA. No suitable roosting habitat in the form of open crevices in the bridge structure or nearby anthropogenic structures is present to support maternity colonies for locally occurring special-status bat species (Pallid bat or Townsend's big-eared bat [*Corynorhinus townsendii*]). In addition, these species are highly susceptible to anthropogenic disturbance when selecting roosting sites and, therefore, were deemed unlikely to take up roosting in marginal tree canopy habitat onsite given the level of disturbance from the roadway.

In addition, both the Blucher Creek and Gossage Creek bridges are constructed using a box culvert design with smooth surfaces without seams. This would provide no suitable night roosting habitat. Night roosting below the Jones Creek Bridge or within adjacent trees may occur during migration or with more commonly occurring bat species. Implementation of AMM-BIO-11 and AMM-BIO-12, as summarized in Appendix C, would reduce potential impacts to roosting bats.

**Western Pond Turtle:** The western pond turtle (*Emys marmorata*; WPT) is a California SSC. There is no breeding habitat, as well as no pond, located within the BSA. Presence within the BSA is inferred, as suitable habitat is present within the BSA and in creeks, ditches, and drainages near the BSA. There are 11 occurrences within a 5-mile radius of the BSA, but none have been recorded within Jones, Blucher, or Gossage creeks.

Suitable aquatic habitat is present within perennial open water habitats within the BSA. Potential Project impacts include temporary loss of habitat during construction at Jones Creek, potential loss of individuals during vegetation removal, removal of MBGR and installation of MGS, and generation of demolition and construction debris.

Implementation of PF-BIO-2 through PF-BIO-4, PF-BIO-6 through PF-BIO-9, PF-BIO-12, AMM-BIO-3, AMM-BIO-4, and AMM-BIO-6, as summarized in Appendix C, would reduce, avoid, or minimize impacts to WPT and its habitat. The impact would be less than significant.

**California Freshwater Shrimp:** The California freshwater shrimp (*Syncaris pacifica*; CFS) is a state and federally endangered decapod crustacean found in low-elevation (generally less than 380 feet), low-gradient (generally less than 1 percent), freshwater perennial streams in Marin, Napa, and Sonoma counties, California. CFS is known to only 17 stream locations.

There are two CNDDDB occurrences within a 5-mile radius of the BSA: upstream along Blucher Creek, 2 miles upstream from the Blucher Creek Bridge, as well as along Green Valley Creek downstream of the Jones Creek Bridge. Suitable low-gradient stream habitat with dense riparian cover is present along all three bridge locations; however, concrete linings below the Blucher and Gossage Creek bridges make suitable habitat below the bridge and within the Project footprint absent. Jones Creek provides suitable low-gradient streams and overhanging vegetation.

Implementation of PF-BIO-2, AMM-BIO-3, AMM-BIO-5, AMM-BIO-7, and AMM-BIO-8, as summarized in Appendix C, would reduce, avoid, or minimize impacts to CFS. Temporary impacts to aquatic habitat within Jones Creek have the potential to result in direct impacts to CFS, including the removal of overhanging vegetation and temporary stream diversion. Potential Project impacts are anticipated to be temporary. The impact would be less than significant.

#### **b) Less Than Significant Impact**

The Project would not have a substantial adverse effect on riparian habitat or environmentally sensitive natural communities. The Project is not anticipated to require tree removal. Project activities would include vegetation clearing and grubbing, however, there is no anticipated loss of permanent riparian habitat. Implementation of PF-AES-3 through PF-AES-5 and AMM-AES-2, as summarized in

Appendix C, would reduce, avoid, or minimize impacts to riparian habitat or environmentally sensitive natural communities. The impact would be less than significant.

**c) Less Than Significant Impact**

There is one 0.007-acre wetland under federal or state jurisdiction present within the approximately 2.10-acre total BSA. This wetland is located south of Jones Creek and east of SR 116 within the BSA for Jones Creek, but outside of the Project footprint. Temporary access to Jones Creek would be required during construction and clearing and grubbing within 30 feet of the bridge may be required. These temporary activities could result in indirect temporary impacts to the 0.007-acre wetland but would not result in permanent loss of the wetland. The impact would be less than significant.

**d) Less Than Significant Impact**

Jones Creek within the BSA provides suitable potential migration habitat for anadromous and freshwater fish species. The replacement of the bridge rail system would not impact the bridge structure and, therefore, would not create or maintain an existing fish passage barrier because Jones Creek is not currently listed as a barrier in the Passage Assessment Database (CDFW 2022b). The existing Gossage Creek and Blucher Creek stream channels and bridge culverts within the BSA potentially provide passage for small vertebrates to medium-sized mammals, but no modifications are planned to the existing structures that would create a new barrier. Access to the immediate construction area would be restricted during construction with the installation of ESA fences and Wildlife Exclusion Fencing (WEF) as described in PF-BIO-3. These represent potential temporary obstructions to passage below SR 116. Medium- to large-sized mammals could be entrapped or injured by equipment or excavations if they are not completely covered. However, the new bridge rails would not create any new permanent barriers to passage below those bridges. Therefore, there would be a less than significant impact.

**e) No Impact**

The Project would not conflict with any local policies or ordinances protecting biological resources. The Project is not anticipated to require tree removal. There would be no impact.

**f) No Impact**

The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan. There would be no impact.

**PROJECT FEATURES**

Caltrans would incorporate standard project features into the Project to offset potential impacts to biological resources. **PF-BIO-1** through **PF-BIO-12** are discussed here and summarized in Appendix C.

- **PF-BIO-1: Environmentally Sensitive Area Fencing.** Prior to the initiation of construction, the boundaries of the described construction footprint would be clearly delineated using high-visibility orange fencing. The fencing would remain in place throughout the Project duration and would prevent construction equipment or personnel from entering environmentally sensitive areas or areas that were not analyzed for ground-disturbing actions. The final Project plans would depict the locations where fencing would be installed and how it would be assembled or constructed. The special provisions in the bid solicitation package would clearly describe acceptable fencing material, prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface disturbing activities.
- **PF-BIO-2: Construction Work Windows.** Where feasible, construction adjacent to the creeks or on the bridges would be restricted to the dry season, during low creek flows, starting June 1 and ending October 31. Any construction work would be limited to when the creek is dry or when a TCDS is installed. When feasible, advance vegetation trimming or removal is expected to occur outside of the bird nesting season (February 1 through September 30).
- **PF-BIO-3: Wildlife Exclusion Fencing (WEF).** Before starting construction, at the discretion of the Caltrans biologist, WEF would be installed along the Project footprint perimeter in the areas where wildlife could enter the Project footprint. The WEF would be removed following completion of construction activities. At the discretion of the Caltrans biologist, WEF may be removed at times when construction is no longer active in the area.
- **PF-BIO-4: Worker Environmental Awareness Training.** Prior to ground-disturbing activities, a permitting agency-approved biologist would facilitate a

mandatory environmental education program for all construction personnel. Training sessions would be repeated for all new personnel before they are allowed access to the job site. The training would include a minimum of the following:

- A description of any special-status species, such as CRLF, WPT, CFS, anadromous fish, potential listed plant species, roosting bats, and migratory birds, habitat needs, and habitats with the potential to occur in the BSA.
  - How the species might be encountered within the Project area and an explanation of the status of these species and protection under federal and state regulations.
  - A review of the measures to be implemented to conserve listed species and their habitats as they relate to the work site and how the measures reduce effects on the species.
  - Boundaries within which construction would occur and how to best avoid the incidental take of listed species.
  - An explanation of applicable federal and state laws protecting endangered species as well as the importance of compliance with Caltrans and various resource agency conditions. The program would also include a discussion of the consequences of noncompliance.
  - Forms to be signed by Project personnel upon completion of the training program stating that they attended the program and understand all the project features and AMMs, including consequence of noncompliance. Sign-in sheets would be kept on file and would be available to regulatory agencies upon request. The training and associated material would be available in languages other than English as needed.
  - A pamphlet containing photos of CRLF, WPT, CFS, potential listed plants, and anadromous fish, compliance reminders, relevant contact information, including the approved biologist's contact information. The pamphlet would be prepared and distributed to all construction personnel entering the Project area.
- **PF-BIO-5: Pre-construction Bird Surveys.** During the nesting season (February 1 through September 30), pre-construction surveys for nesting birds would be conducted by a qualified biologist no more than 72 hours prior to the

start of construction activities. If an active nest is discovered, biologists would establish an appropriate exclusion buffer around the nest (at least 300 feet for raptors and 50 feet for all other species) or in coordination with regulatory agencies. The area within the buffer would be avoided until the young are no longer dependent on the adults or the nest is no longer active. If a nesting special-status bird species is discovered, the biologist would notify the USFWS and/or CDFW for further guidance. Partially constructed and inactive nests may be removed to prevent occupation. Nesting birds near the Project footprint would be regularly monitored for signs of disturbance. To the extent feasible, tree removal would not occur during the nesting season.

- **PF-BIO-6: Avoidance of Entrapment.** To prevent inadvertent entrapment of CRLF and other wildlife during construction:
  - Excavated, steep-walled holes or trenches more than 1 foot deep would be covered at the close of each working day using plywood or similar materials or provided with at least one escape ramp constructed of earth fill or wooden planks. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Replacement pipes, culverts, or similar structures stored in the Project area overnight would be inspected before they are subsequently moved, capped or buried.
  - Plastic monofilament netting or similar material would not be used to avoid entrapment of CRLF and other wildlife. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
  
- **PF-BIO-7: Implementation of Best Management Practices (BMPs):** A Stormwater Pollution Prevention Plan may be needed depending on the extent of the disturbed soil areas. However, erosion control BMPs will be included in the plans and special provisions to comply with the requirements of the RWQCB General Construction Permit. The Caltrans BMP Guidance Handbook would provide guidance for design staff to include provisions in construction contracts for measures to protect sensitive areas and prevent and minimize stormwater and non-stormwater discharges. Protective measures would include, at a minimum, the following:
  - Disallowing any discharging of pollutants from vehicle and equipment cleaning into any storm drains or watercourses.

- Keeping vehicle and equipment fueling and maintenance operations at least 50 feet away from watercourses, except at established commercial gas stations or an established vehicle maintenance facility.
- Storing all grindings and asphaltic-concrete waste within previously disturbed areas absent of habitat and at a minimum of 50 feet from any downstream riparian habitat, aquatic habitat, culvert, or drainage feature, or removing from the site at the end of each day.
- Designating dedicated fueling and refueling practices as part of the approved Stormwater Pollution Prevention Plan. Dedicated fueling areas would be protected from stormwater run-on and would be located at least 50 feet from downslope drainage facilities and watercourses. If this is not possible, then fueling would be conducted as stated in the RWQCB General Construction Permit and Caltrans BMP Guidance Handbook.
- Maintaining spill containment kits onsite at all times during construction operations and/or staging or fueling of equipment.
- Implementing dust and erosion control measures consistent with the RWQCB General Construction Permit and the Caltrans BMP Guidance Handbook.
- Protecting graded and designated staging areas consistent with the RWQCB General Construction Permit and the Caltrans BMP Guidance Handbook.
- **PF-BIO-8: Construction-site Management Practices.** The following site restrictions would be implemented to avoid or minimize potential effects on listed species and their habitats:
  - Project-related vehicle traffic would be restricted to established roads and construction areas. The speed limit of 15 miles per hour in the Project footprint and in unpaved and paved areas would be enforced to reduce dust and excessive soil disturbance.
  - Project personnel would be required to comply with current guidance governing vehicle use, speed limits, fire prevention, and other hazards.
  - Construction access, staging, storage, and parking areas would utilize existing Maintenance Vehicle Pullouts, existing paved areas, gravel shoulder backing, and disturbed areas within the Project limits. Staging and storage areas would

- be located at least 50 feet from wetlands, the ordinary high-water mark (OHWM) of jurisdictional waters, a concentrated flow of stormwater, a drainage course, or an inlet, unless additional containment efforts are used. Access routes and boundaries of the footprint would be clearly marked prior to initiating construction activities and would be limited to the extent necessary to construct the proposed Project. Only approved areas clearly delineated in the plans may be used for staging and storage.
- Any borrow material must be certified non-toxic and free of weeds to the maximum extent possible.
  - All food-related trash items, such as wrappers, cans, bottles, and food scraps, would be disposed of in closed containers and removed at least once daily from the Project footprint.
  - All pets would be prohibited from entering the Project area during construction to prevent harassment of, injury to, or mortality of sensitive species.
  - Firearms would be prohibited within the Project site, except for those carried by authorized security personnel or local, state, or federal law enforcement officials.
- **PF-BIO-9: Replant, Reseed, and Restore Disturbed Areas.** Caltrans would restore temporarily disturbed areas to the maximum extent practicable. Exposed slopes and bare ground would be reseeded with native and appropriate non-invasive grasses and native shrubs to stabilize and prevent erosion. Where disturbance includes the removal of trees and woody shrubs, native species would be replanted at a ratio to be determined in a later Project phase, based on the local species composition.
  - **PF-BIO-10: Vegetation Removal.** Vegetation growing in locations due to be graded or where permanent structures would be placed would be cleared. Vegetation would be cleared only where necessary and would be cut above ground level, except in areas that would be excavated. This would allow plants that reproduce to resprout after construction. Clearing and grubbing of woody vegetation would occur by hand or using construction equipment such as mowers, backhoes, and excavators. If clearing and grubbing occur between February 1 and September 30, a qualified biologist would survey for nesting birds within the



areas to be disturbed. If an active nest is found, nest buffers would be established as stated in PF-BIO-5.

- **PF-BIO-11: Reduce Spread of Invasive Species.** To reduce the spread of invasive, non-native plant species and minimize the potential decrease of palatable vegetation for wildlife species, Caltrans would comply with Executive Order (EO) 13112. This order is provided to prevent the introduction of invasive species and provide for their control to minimize the economic, ecological, and human health effects. In the event that noxious weeds are disturbed or removed during construction-related activities, the contractor would be required to contain the plant material associated with these noxious weeds and dispose of them in a manner that would not promote the spread of the species. The contractor would be responsible for obtaining all permits, licenses, and environmental clearances for properly disposing of materials. Areas subject to noxious weed removal or disturbance would be replanted with fast-growing native and appropriate non-invasive grasses or a native erosion control seed mixture. Where seeding is not practical, the target areas within the Project area would be covered to the extent practicable with heavy black plastic solarization material until disturbed areas are restored to pre-construction conditions.
- **PF-BIO-12: Detection and Handling of Listed Species.** If, at any time, a listed species is discovered in the Project area, the Resident Engineer and the agency-approved biologist would be immediately informed. Caltrans would then coordinate with appropriate state and federal agencies or as otherwise authorized in permits. All construction activities within 50 feet of the individual may be suspended. The Project biologist would determine if relocating the species is necessary and would work with the corresponding agency prior to handling or relocating unless otherwise authorized.

#### **AVOIDANCE AND MINIMIZATION MEASURES**

AMM-BIO-1 through AMM-BIO-12, as discussed here and summarized in Appendix C, would avoid or minimize impacts to biological resources.

- **AMM-BIO-1: Rare Plant Pre-construction Surveys/Salvage.** Caltrans would conduct pre-construction, protocol-level surveys for rare plants. Surveys would be conducted during the appropriate blooming time for potentially occurring species and take place prior to the beginning of construction. If special-status plants are found, they would be avoided where feasible and ESA would be designated. If

avoiding these plants is not feasible, in coordination with all relevant agencies, plants in the Project footprint would either be salvaged and replanted into suitable adjacent habitat in the Caltrans ROW or seed or other propagules would be collected for future transplanting. Additional measures may be developed during consultation with regulatory agencies.

- **AMM-BIO-2: Pre-construction Survey for CRLF.** An agency-approved biologist would conduct pre-construction CRLF surveys. Visual encounter surveys would be conducted immediately before ground-disturbing activities. Suitable aquatic and upland habitat within the Project footprint, including refugia habitat such as under shrubs, downed logs, small woody debris, and burrows, would be inspected. If a CRLF is observed, the individual would be evaluated and relocated in accordance with the observation and handling protocol outlined in the following sections. Fossorial mammal burrows would be inspected for signs of frog usage, to the extent practicable. If it is determined that a burrow may be occupied by a CRLF, work would be paused, and relevant agencies would be contacted to determine how to proceed.
- **AMM-BIO-3: Biological Monitoring.** The agency-approved biologist would be present during construction activities where take of a listed species could occur including site preparation activities. Through communication with the Resident Engineer or a designee, the agency-approved biologist may stop work if deemed necessary for any reason to protect listed species and would advise the Resident Engineer or designee on how to proceed accordingly.
- **AMM-BIO-4: Lighting Restrictions.** In the event that nightwork is required, construction personnel would turn portable tower lights on no more than 30 minutes before the beginning of civil twilight and off no more than 30 minutes after the end of civil sunrise. Portable tower lights would have directional shields attached to them, and personnel would only direct lights downward and toward active construction and staging areas. If future Project plans include the addition of nighttime work, then Caltrans would reassess impacts on sensitive resources.
- **AMM-BIO-5: Rain Events.** The Caltrans biologist would monitor weather and, in coordination with the Resident Engineer, determine which construction activities may need to be halted within 24 hours of a 0.1-inch rain event, or when there is a forecast of 40 percent or more chance of precipitation, to ensure protection of CRLF and other aquatic species. If, by 2 p.m., rain is forecast for the

- remainder of the day or subsequent night with a 70 percent or greater probability of rain (based on the nearest National Weather Service forecast, available at <http://forecast.weather.gov>), work may be postponed until 24 hours have passed between the last rain event and the start of work.
- **AMM-BIO-6: Pre-construction Surveys for WPT.** An approved biologist would conduct pre-construction surveys for WPT as needed. A visual encounter survey would be conducted immediately before ground-disturbing activities. Suitable habitat within the Project footprint would be visually inspected. If WPT is found within the Project footprint and at risk of harm, then it would be relocated outside of the Project footprint by the approved biologist.
  - **AMM-BIO-7: Limit Removal of Willows and Blackberry from Streambank.** The Project would avoid removal of willows and blackberry located along the side of the creek to the maximum extent practicable, as the overhanging vegetation may provide limited cover to CFS.
  - **AMM-BIO-8: CFS Relocation Plan.** In coordination with CDFW and USFWS, Caltrans would prepare and submit a Temporary Creek Diversion and California Freshwater Shrimp Relocation Plan for the Jones Creek Bridge location to be approved by agencies prior to the start of construction. This plan would include all proper diversion and dewatering BMPs to minimize potential direct impacts to CFS individuals.
  - **AMM-BIO-9: Pre-construction Survey for anadromous fish:** An agency-approved biologist would conduct a pre-construction visual survey (bank observations). When listed species are present and it is determined that they could be injured or killed by construction activities, a qualified Project biologist would identify appropriate methods for capture, handling, exclusion, and relocation of individuals that could be affected.
  - **AMM-BIO-10: Fish Relocation Plan:** In coordination with agencies, Caltrans would develop and submit a Temporary Stream Diversion and Fish Relocation Plan for the Jones Creek work location for approval prior to the start of construction.
  - **AMM-BIO-11: Roosting and Pre-construction Bat Surveys.** During the design phase, an approved biologist would conduct surveys for bats and bat habitat in the Project footprint and bat occupancy within the existing bridge structures to

determine the presence of bats and the potential for day or night roosting habitat. At least 48 hours prior to the start of construction, follow-up surveys would also be performed.

- **AMM-BIO-12: Bat Exclusionary Measures.** If design phase surveys reveal occupancy, prior to construction, Caltrans or its contractor would implement bat exclusionary measures, such as filling crevices with expandable foam, on existing bridge structures if deemed necessary by an approved biologist. In addition, these measures must be put in place either between March 1 and April 15 or between August 31 and October 15 to deter maternity roosting.

### 3.3.5 Cultural Resources

Would the Project:

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Less Than Significant Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR CULTURAL RESOURCES

Caltrans’ Professionally Qualified Staff (PQS) conducted a cultural resources investigation for the Project in accordance with the *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, California State Historic Preservation Officer and the California Department of Transportation Regarding compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of Federal-Aid Highway Program in California* (PA) (FHWA 2014) and prepared a *Section 106 Closeout Memo for the Sonoma 116 Bridge Railing Replacement Project between Post Miles 19.90 and 33.37 on State Route 116, in Sonoma County* (Caltrans 2022b).

The area of potential effects (APE) for the Project was established in consultation with Caltrans’ PQS and the Project Manager on February 7, 2022. The archaeological and architectural history APE were established to include all areas of direct impact and the maximum extent of construction-related activities. Caltrans’ PQS reviewed Project information, the Caltrans Cultural Resource Database, as-built plans, aerial photographs, and historical maps to evaluate the Project’s potential to affect cultural resources in the APE. One archaeological site previously determined eligible for inclusion in the National Register of Historic Places in 1993 was identified in the APE and will be protected in its entirety from any potential effects through the establishment of an ESA, in accordance with PA Stipulation VIII.C.5. No historic built resources were identified within the APE. The vertical APE/Area of Direct Impact (ADI) is the maximum extent of ground disturbance from construction-related activities, which is anticipated to be 4.5 feet below ground surface (Caltrans 2022b).

On December 14, 2021, Caltrans contacted the Native American Heritage Commission (NAHC) and requested a review of their Sacred Lands File (SLF). The

results of the SLF were positive and a list of Native American contacts with potential interest or information regarding the APE was provided. On March 7, 2022, under Assembly Bill 52 and as part of the Section 106 of the National Historic Preservation Act process, Caltrans' Office of Cultural Resources Studies (OCRS) sent consultation initiation letters to all contacts provided by the NAHC (Caltrans 2022b).

One response was received during a meeting with the Federated Indians of Graton Rancheria (Graton Rancheria) on March 17, 2022, indicating that the Tribal Historic Preservation Officer (THPO) of Graton Rancheria did not need to attend cultural fieldwork scheduled later in March but that the Tribe would like to be kept informed of the results of the fieldwork. Updates were provided on April 25, 2022, and copies of cultural documents were sent to the Tribe for review and comment in June 2022. The Tribe sent comments back in July 2022 that were addressed, and consultation is ongoing. Follow-up emails were also sent to all other contacts regarding the Project on May 23, 2022; however, no responses have been received to date. Consultation with Graton Rancheria is ongoing and will continue throughout the life of the Project (Caltrans 2022b).

Pursuant to the PA, Caltrans OCRS determined that a Finding of No Adverse Effect with Standard Conditions – ESA is appropriate for this undertaking. A Historic Property Survey Report documenting three Category 5 bridges and one archaeological site, an Archaeological Survey/Extended Phase I Report, and an ESA Action Plan were completed (Caltrans 2022b), and the Caltrans Cultural Studies Office did not object to the finding on August 2, 2022.

**a, b, and c) Less Than Significant Impact**

There was one archaeological site identified in the APE, which will be protected in its entirety from any potential effects through the establishment of an ESA. Therefore, there would be a less than significant impact.

California law recognizes the need to protect interred human remains, particularly Native American burials and associated items of patrimony, from vandalism and inadvertent destruction. The procedures for the treatment of discovered human remains are contained in the California Health and Safety Code Sections 7050.5 and 7052, and the California Public Resources Code Section 5097.

Implementation of PF-CULT-1, PF-CULT-2, and AMM-CULT-1, would reduce the impact to less than significant.

## PROJECT FEATURES

Caltrans would incorporate the following project features to reduce impacts to cultural resources:

- **PF-CULT-1: Cease Work Upon Discovery of Cultural Resources.** Cease work if cultural resources are encountered during Project-related ground-disturbing activities, have a qualified archaeologist assess the significance of the resource, and implement appropriate avoidance or treatment measures, in coordination with local consulting tribes.

If buried cultural materials are encountered during construction, work would be stopped until a qualified archaeologist can evaluate the nature and significance of the find. The need for archaeological and Native American monitoring during the remainder of the Project would be reevaluated by Caltrans Archaeologists and local consulting tribes as part of the treatment measure determination. The archaeologist would consult with appropriate Native American representatives in determining suitable treatment for unearthened cultural resources if the resources are Native American in nature.

- **PF-CULT-2: Stop Work Upon Discovery of Human Remains.** In accordance with the California Health and Safety Code, if human remains are uncovered during construction-related activities, all such activities within a 60-foot radius of the find will be halted immediately and the Project's designated representative will be notified. The contractor or lead person on the Project will immediately notify the OCRS Office Chief and/or the District Native American Coordinator (DNAC). Once the remains are determined human, the lead person, OCRS Office Chief, or DNAC will contact the County Coroner and the NAHC. Although the Coroner has the ultimate responsibility to contact the NAHC, Caltrans OCRS contacts the NAHC at this time to provide information on the discovery and to assure the NAHC that appropriate action is being taken. The Coroner is required to examine the discovery of human remains within 48 hours of received notification of such a discovery on private or state lands (California Health and Safety Code Section 7050.5[b]). If the Coroner inspects the remains and determines that the remains are not Native American and/or determines they are a result of a wrongful death, the Coroner may take possession of the remains for further inquiry, release them to next of kin, or order the body to be reinterred. After the above action has been taken, work may resume on the Project. If the Coroner determines that the remains are those of a Native American, he or she

must contact the NAHC by phone within 24 hours of making the determination (California Health and Safety Code Section 7050.5[c]). The Project's designated representative will be responsible for acting upon notification of discovery of Native American human remains, as identified in detail in California Public Resources Code Section 5097.9. The Project's designated representative and the professional archaeologist will contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the property owner and Caltrans, will determine the ultimate disposition of the remains. The lead person ensures that the recommendations are followed. After the appropriate actions are taken, Project work may resume.

#### **AVOIDANCE AND MINIMIZATION MEASURES**

Caltrans would incorporate the following AMMs into the Project to avoid and/or minimize potential impacts to cultural resources:

- **AMM-CULT-1: Establish and Enforce ESAs.** Archaeological ESAs will be delineated on the plans and described in the specifications. Appropriate protective measures including demarcations with flags or high-visibility spray paint, access restrictions, and monitoring of the ESA boundaries by a qualified archaeologist and local tribal representatives will be implemented during construction.



### 3.3.6 Energy

Would the Project:

Question	CEQA Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	Less Than Significant Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR ENERGY

An Energy Analysis Report was prepared by the Caltrans Office of Environmental Engineering (Caltrans 2022c) and is summarized here.

#### a) Less Than Significant Impact

Greenhouse gases (GHGs) are the most extensively studied byproducts of energy consumption because they are linked to climate change. To assess gasoline and diesel consumed by construction equipment and vehicles, the Road Construction Emissions Model (RCEM), version 9.0.0, provided by the Sacramento Metropolitan Air Quality Management District, was used to quantify Carbon dioxide (CO<sub>2</sub>) emissions and vehicle miles traveled (VMT) for workers' vehicles. USEPA GHG equivalencies formulas were used to convert GHG and VMT to fuel volumes. It was assumed that diesel will be used by construction vehicles and equipment, and gasoline will be used during worker's commute. The Project is anticipated to consume approximately 40,140 gallons of diesel fuel and approximately 6,265 gallons of gasoline (Caltrans 2022c).

During construction, Project features PF-ENERGY-1 through PF-ENERGY-3, presented at the end of this section, would be implemented to improve energy efficiency of construction equipment. In addition, implementation of PF-AQ-2 and PF-AQ-3, as discussed in Section 3.3.3, would also improve energy efficiency and reduce energy consumption by Project construction.

Construction-related activities would be short-term and the Project would not increase SR 116 transportation capacity or otherwise alter long-term vehicle traffic, and thus would not have the potential to substantially affect energy use. During Project operation, energy consumption would be limited to routine maintenance-related activities that would be similar to existing conditions. Therefore, the Project would

not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction and operation. The Project would have a less than significant impact.

**b) No Impact**

The proposed Project would not result in changes in traffic volumes, vehicle mix, or any other factor that would cause an increase in energy consumption. The Project would not conflict with a regional, state, or local plan for renewable energy or energy efficiency. Therefore, the Project would not conflict with the regional/statewide goals on renewable energy or energy efficiency and there would be no impact.

**PROJECT FEATURES**

Caltrans would incorporate the following standard project features into the Project to reduce potential impacts to energy:

- **PF-ENERGY-1: Recycle Waste and Materials.** Recycle nonhazardous waste and excess construction materials to reduce disposal, if feasible.
- **PF-ENERGY-2: Solar Energy.** Use solar energy as the energy source for construction equipment, such as, but not limited to, signal boards, if feasible.
- **PF-ENERGY-3: Vehicle Maintenance.** Use regular vehicle and equipment maintenance.

### 3.3.7 Geology and Soils

Would the Project:

Question	CEQA Determination
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact
(ii) Strong seismic ground shaking?	No Impact
(iii) Seismic-related ground failure, including liquefaction?	No Impact
(iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR GEOLOGY AND SOILS

A Geology, Seismicity, Soils, Paleontology Technical Study was prepared by the Caltrans Office of Geotechnical Design—West (Caltrans 2023b) and is summarized here.

The Jones Creek Bridge lies on Holocene Alluvium associated with creek deposition. No paleontologically sensitive geologic units are present at the site. The Blucher Creek Bridge lies in younger Holocene Alluvium associated with late stream deposits. Artificial fill associated with the highway construction underlie either abutment of the bridge and bridge approaches. No paleontologically sensitive geologic units are present at the site. The Gossage Creek Bridge lies on Quaternary Alluvium associate with older fan deposits. No paleontologically sensitive units underlie the area around the bridge.

**a, b, c, d, e, and f) No Impact**

The Project would be subject to strong ground shaking from local faults, including the Roger's Creek to the east and San Andreas fault to the west. However, while there would be minor widening at the Blucher Creek Bridge, work would be within previously disturbed ground associated with the original roadway and bridge construction. The Project does not lie within an Alquist-Priolo Special Studies Zone and would not experience hazards from fault rupture, nor would the Project expose the public to other seismic hazards, such as liquefaction or seismically induced landslides.

Ground-disturbing activities would occur in previously disturbed areas; however, Project components would not be constructed in areas of soft, erodible, expansive, or collapsible soils, and BMPs would be used to minimize erosion during construction activities.

The Project is not located on a geologic or soil unit that is unstable, and no septic tanks or alternative wastewater delivery systems would be constructed or affected by the Project. In addition, no sensitive palaeontologic resources would be encountered (Caltrans 2023b). Therefore, no impact would occur.

**3.3.8 Greenhouse Gas Emissions**

Would the Project:

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

**CEQA SIGNIFICANCE DETERMINATIONS FOR GREENHOUSE GAS EMISSIONS**

A Construction GHG Emissions Analysis was prepared by the Caltrans Office of Environmental Engineering (Caltrans 2022d) and is summarized here.

**a) Less Than Significant Impact**

Construction-generated GHG includes emissions resulting from material processing by onsite construction equipment, workers commuting to and from the Project site, and traffic delays due to construction. The emissions will be produced at different rates throughout the Project depending on the activities involved at various phases of construction. The analysis was focused on vehicle-emitted GHG. CO<sub>2</sub> is the single most important GHG pollutant due to its abundance when compared with other vehicle-emitted GHG, including methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons, and black carbon.

RCEM version 9.0.0 was provided by the Sacramento Metropolitan Air Quality Management District and was used to quantify GHG emissions. During construction, the Project is anticipated to emit approximately 507.8 tons of CO<sub>2</sub>, 0.05 ton of CH<sub>4</sub>, and 0.01 ton of N<sub>2</sub>O. Total GHG emissions are presented as carbon dioxide equivalent (CO<sub>2</sub>e) by multiplying each GHG by their global warming potential (GWP). GWP is a measure of how much energy the emissions of 1 ton of a GHG will absorb over a given period, relative to the emissions of 1 ton of CO<sub>2</sub>. Total construction emissions of GHG of the Project is 463.8 metric tons of CO<sub>2</sub>e (Caltrans 2022d). The Project would not increase SR 116 transportation capacity and therefore would not generate long-term GHG emissions.

The Project would implement Caltrans Standard Specifications such as complying with applicable air-pollution control rules, regulations, ordinances, and statutes and the use of construction site BMPs to minimize short-term GHG emissions from

construction activities. Project features PF-AQ-2 and PF-AQ-3 (Section 3.3.3) and PF-ENERGY-1 through PF-ENERGY-3 (Section 3.3.6) would reduce air emissions, energy consumption, and GHG emissions.

Therefore, the Project would not generate GHG emissions that may have a significant impact (that is, long-term adverse effects) on the environment. The impacts would be less than significant.

**b) No Impact**

Plans and policies adopted for the purposes of reducing GHG emissions in California include multiple Senate Bills, Assembly Bills, and Executive Orders. These policies establish GHG emissions reduction goals, set low-carbon fuel standards, support rapid commercialization of zero-emission vehicles, fund clean vehicle programs, and require climate adaptation planning. The Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) developed the Plan Bay Area, a Regional Transportation Plan and Sustainable Communities Strategy for the Bay Area, which includes strategies and policies for reducing GHG emissions (ABAG and MTC 2021).

The Project would comply with applicable state and regional GHG reduction policies and implement emission control measures to minimize or reduce GHG emissions. The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The Project would not contribute to a long-term increase in GHG emissions. Therefore, the Project would not conflict with applicable plans, policies, or regulations adopted for the purposes of reducing the emissions of GHGs. There would be no impact.

**3.3.9 Hazards and Hazardous Materials**

Would the Project:

Question	CEQA Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less Than Significant Impact

**CEQA SIGNIFICANCE DETERMINATIONS FOR HAZARDS AND HAZARDOUS MATERIALS**

Three residential structures and/or light commercial property are located within approximately 500 feet of the Jones Creek Bridge, Blucher Creek Bridge, and Gossage Creek Bridge. SR 116 is a conventional public highway, with motorists and bicyclists frequently traveling along the route.

**a and b) Less Than Significant Impact**

Upgrading the bridge railings at all three bridges would not increase the routine transport or use of hazardous materials when the Project becomes operational. During construction, Caltrans’ Standard Specifications would be implemented to prevent spills or leaks from construction equipment and from storage of fuels, lubricants, and solvents. All aspects of Project construction associated with removal, storage, transportation, and disposal of hazardous materials would be done in accordance with the appropriate California Health and Safety Code. Handling of hazardous materials

would comply with Caltrans Standard Specification 14-11, Hazardous Waste and Contamination, which outlines handling, storage, and disposal of hazardous waste.

The Caltrans Office of Environmental Engineering requires the Project to conduct surveys that would screen the bridges for asbestos-containing materials and lead-based coatings prior to construction. The three bridges would require structural concrete to be screened for asbestos fiber prior to demolition. If elevated levels of hazardous materials are identified during surveys, the appropriate SSPs would be taken, including required notification of the Bay Area Air Quality Management District, to safely and thoroughly remove, transport, and dispose of the materials at an appropriate offsite waste facility.

The lack of operational impacts from hazardous materials, along with compliance with Caltrans' Standard Specifications and SSPs, would reduce the potential construction impacts caused by the transportation, use, and disposal of hazardous materials or an accidental release of hazardous materials to a less than significant level.

**c) No Impact**

Forestville School is an elementary school located approximately 0.20 mile northwest of the Jones Creek Bridge. No existing or proposed schools are located within 0.25 mile of the Blucher Creek Bridge or Gossage Creek Bridge. Although there is an existing school within 0.25 mile of the Jones Creek Bridge, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste during construction and operation. Therefore, no impacts to schools would occur as a result the Project.

**d) No Impact**

Screening of environmental regulatory databases, including the State Water Resources Control Board (SWRCB) GeoTracker and California Department of Toxic Substances Control (DTSC) EnviroStor, revealed no known hazardous materials or hazardous waste sites within the Project footprint (SWRCB 2022; DTSC 2022).

There are six cleanup program sites located that are within 500 feet to 0.5 mile of the Jones Creek Bridge, three that are within 50 feet to 0.5 mile of the Blucher Creek Bridge, and three that are within 900 feet to 0.3 mile of the Gossage Creek Bridge. The details of these sites are described in Table 3-1.



**Table 3-1. Cleanup Program Sites Within 0.5 mile of the Project**

Cleanup Program Site	Sonoma County Case Number	RWQCB Case Number	Potential Contaminates of Concern	Current Status	Nearest Bridge
Forestville Road Yard	00002034	1TSO129	Diesel, Gasoline	Completed - case closed as of 11/12/2015	Jones Creek Bridge (500 feet east)
Forestville Union Elementary School	00002411	1TSO406	Gasoline	Completed - case closed as of 1/26/1993	Jones Creek Bridge (0.25 mile southeast)
Forestville Chevron	00001158	1TSO067	Gasoline	Open - verification monitoring as of 3/2/2021	Jones Creek Bridge (0.25 mile southeast)
Electro Vector	N/A	1NSO901	Trichloroethylene	Open - assessment and interim remedial action as of 6/13/2017	Jones Creek Bridge (0.25 mile southeast)
Forestville BP	00001411	1TSO381	Gasoline	Completed - case closed as of 8/9/2013	Jones Creek Bridge (0.25 mile southeast)
Dave's Pit Stop	00002400	1TSO717	Gasoline	Completed - case closed as of 11/17/2005	Jones Creek Bridge (0.5 mile southeast)
Topa Thrift & Loan	00010260	1TSO475	Diesel, Gasoline	Completed - case closed as of 4/16/1997	Blucher Creek Bridge (450 feet northwest)
Stone Station, Inc.	00001733	1TSO034	Gasoline	Completed - case closed as of 5/6/2021	Blucher Creek Bridge (0.3 mile southeast)
Yeast Property	00027865	1TSO952	Gasoline	Completed - case closed as of 4/20/2020	Blucher Creek Bridge (0.5 mile southeast)
Clark Property	00002724	1TSO343	Gasoline	Completed - case closed as of 12/11/2002	Gossage Creek Bridge (900 feet west)
Willow Tree Stables	00001648	1TSO559	Diesel	Completed - case closed as of 2/3/1994	Gossage Creek Bridge (0.3 mile southwest)
Cotati Rod & Gun Club	N/A	1NSO656	N/A	Open - site assessment as of 1/29/1999	Gossage Creek Bridge (0.3 mile northeast)

The Project is not located on a hazardous materials site compiled pursuant to Government Code Section 65962.5. Therefore, no impact would result from the Project.

**e) No Impact**

The Project corridor is not within an airport land use plan or within 2 miles of a public airport or public use airport. The Project is not located within any airport land use plans.

No Project components, including construction equipment, would reach heights or have the potential to pose a safety hazard to airport operations. Further, the Project would not generate excessive noise that would impact people residing or working adjacent to the Project footprints, as discussed in Section 3.3.13. No impact on airports would result from the Project.

**f) Less Than Significant Impact**

The Project would require the temporary closure of traffic lanes along SR 116. Potential localized delays to traffic along SR 116 would result from the rolling one-lane closures. A Traffic Management Plan (TMP) (PF-TRANS-1), as described in Section 3.3.17, would be prepared prior to the beginning of construction and in consultation with the appropriate agencies, and would include public information and press releases to notify and inform motorists, local businesses, community groups, local entities, emergency services, and local officials of the upcoming rolling one-lane closures. Emergency service response times are not anticipated to change substantially during construction because the TMP would provide priority to emergency and medical vehicles during rolling one-lane closures. The TMP would provide notifications and instructions for rapid response or evacuation in the event of an emergency. In addition, the Project would not conflict with the Sonoma County Emergency Operations Plan (Sonoma County 2022a) or other emergency response or evacuation plans. The impact on adopted emergency response plans or emergency evacuation plans caused by the Project would be less than significant.

**g) Less Than Significant Impact**

The Project corridor is within a California Department of Forestry and Fire Protection (CAL FIRE)-designated Moderate, High, and Very High Fire Hazard Severity Zones (State Resource Areas). Several fire agencies serve the Project corridor and are

responsible for emergency services and the management of fire operations during emergency response efforts.

The Forestville Fire Protection District provides emergency services to the Forestville community, along with surrounding areas, and is located approximately 0.55 mile northwest of the Jones Creek Bridge. The Gold Ridge Fire Protection District provides emergency services to the communities of Hessel, Twin Hills, and Freestone, along with surrounding areas, and is located approximately 0.55 mile northwest of the Blucher Creek Bridge. The Rancho Adobe Fire Protection District provides emergency services to the communities of Penngrove, Cotati, and the unincorporated areas of Petaluma, and is located approximately 2 miles southeast of the Gossage Creek Bridge.

During construction, equipment may be used that has the potential to increase the risk of wildfire. However, construction crews would be equipped with standard incipient stage fire suppression equipment such as fire extinguishers and shovels. Professional fire services are stationed nearby and would be contacted immediately in the event of a fire. The Project does not have permanent components that would expose people or structures to risk of loss, injury, or death involving wildland fires. Impacts from the Project construction that would expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires would be less than significant.

#### **PROJECT FEATURES**

Caltrans would incorporate the following standard project features into the Project to reduce potential impacts to hazards and hazardous materials:

- **PF-HAZ-1: Caltrans Standard Specifications and Hazardous Waste Regulations.** The current Caltrans Standard Specifications Section 13-4, Job Site Management, would be implemented to prevent and control spills or leaks from construction equipment and from storage of fuels, paints, cleaners, solvents, and lubricants. Handling and management of hazardous materials would comply with the current Caltrans Standard Specification Section 14-11, Hazardous Waste and Contamination, which outlines handling, storing, and disposing of hazardous waste.
- **PF-HAZ-2: Soil Investigation.** A soil investigation for metals, primarily lead, and other contaminants of concern (that is, petroleum hydrocarbons and volatile organic compounds) would be completed during the Project's design phase to

characterize and profile the soil to be encountered by the construction of the Project. Depending upon the findings of the site investigation, appropriate hazardous waste management special provisions would be prepared and included in the Project specifications.

### 3.3.10 Hydrology and Water Quality

Would the Project:

Question	CEQA Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less Than Significant Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the Project may impede sustainable groundwater management of the basin?	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;	Less Than Significant Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	Less Than Significant Impact
(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	Less Than Significant Impact
(iv) impede or redirect flood flows?	Less Than Significant Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	Less Than Significant Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR HYDROLOGY AND WATER QUALITY

A Water Quality Study was prepared by the Caltrans Office of Water Quality (Caltrans 2022e) and a Hydraulics Study was prepared by the Office of Hydraulics Engineering (Caltrans 2023c). The findings of both are summarized here.

The Project is located within the jurisdiction of Region 1 of the North Coast Regional Water Quality Control Board (RWQCB), which is responsible for the implementation and enforcement of state laws and regulations concerning water quality. The Project is within the Russian River Hydrologic Unit, Lower Russian River Watershed, and Green Valley Creek subwatershed (Caltrans 2022e). The receiving water bodies are the Russian River and Bodega Bay, which are included as beneficial uses as part of the Region 1 RWQCB Basin Plan. These water bodies are not classified as impaired under the 2014-16 California Clean Water Act Section 303(d) List (SWRCB 2018), nor do they have Total Maximum Daily Loads for any pollutants.

The new impervious surface (NIS) of a project is the sum of the net new impervious (NNI) surface and the replaced impervious surface (RIS). The NNI for the three Project bridges would be 0.06 acre and the RIS would be approximately 0.01 acre. Because the NIS (0.07 acre) is less than 0.23 acre, the Project is not anticipated to require post-construction storm water treatment measures for new impervious surfaces.

Federal Emergency Management Agency (FEMA) flood insurance rate maps show that the Jones Creek Bridge is designated as a Zone X area of minimal flood hazard. Floodplain impacts at Jones Creek are not expected because it is not within a designated floodplain (Caltrans 2023c). The area southwest of the Blucher Creek Bridge is designated as a Zone X area of minimal flood hazard. Northeast of the bridge, the channel is in Zone AE (0.2 percent annual chance flood hazard). Impacts to the floodplain at Blucher Creek are not anticipated because no in-creek work is planned and the bridge roadway surface is assumed to be higher than the flood elevation of the floodplain. The widened roadway section and new bridge railing would not result in fill within the floodplain and does not impede the existing floodplain pattern. FEMA flood insurance rate maps show that the Gossage Creek Bridge is designated as a Zone X area of minimal flood hazard. Floodplain impacts at Gossage Creek are not expected because it is not within a designated floodplain

**a) Less Than Significant Impact**

The Project has the potential to contribute stormwater runoff and pollutants to the Russian River and Bodega Bay during construction-related activities. Implementation of water pollution control BMPs, listed under PF-HYD-1 at the end of this section, would minimize temporary impacts to water quality.

In addition, the disturbed soil area (0.18 acre) does not exceed 1 acre, and therefore the Project is not subject to the Construction General Permit and is not expected to result in long-term impacts to water quality standards or exceed waste discharge requirements. To comply with the conditions of the Caltrans National Pollutant Discharge Elimination System (NPDES) permit and to further reduce impacts associated with water quality and hydrology, a Water Pollution Control Program (WPCP) would be completed and implemented prior to the beginning of construction, as described in PF-HYD-2 at the end of this section. Potential water quality impacts would be reduced to the maximum extent practicable through proper implementation

of the WPCP and inclusion of the SSPs for water pollution control BMPs in the Project. As a result, Project impacts would be less than significant.

**b) No Impact**

Water would be used temporarily during construction, potentially at staging area entrances and exits. Water for construction-related activities would be brought in by the contractor via water trucks and groundwater would not be used. Therefore, the Project would not affect groundwater supplies or groundwater recharge areas and there would be no impact.

**c(i), (ii), (iii), (iv)) Less Than Significant Impact**

The Project would not alter the drainage pattern, and no permanent increases in erosion or siltation are anticipated (Caltrans 2023c). As described in Section 2.2.7, TCDSs would be used at all three bridge locations and would allow flow to continue along the same alignment as its pre-construction condition. Implementation of water pollution control BMPs under PF-HYD-1 and a WPCP under PF-HYD-2 would minimize temporary, construction-related erosion, siltation, and the discharge of polluted runoff on- or offsite. Although construction of the Project would result in 0.07 acre of NIS, the Project would not result in an increase in permanent runoff. Therefore, the impact would be less than significant.

**d) Less Than Significant Impact**

The Project is not located within a FEMA base floodplain or floodway, and as discussed under items a) and c), the Project would not contribute new substantial sources of runoff or pollutants, or result in increased flooding. Because of the nature of the work at the bridges, no floodplain impacts are anticipated. The Project is located in a tsunami zone (CGS 2022a); however, in the case of Project inundation, with implementation of PF-HYD-1, the release of substantial pollutants is not anticipated. Therefore, there would be a less than significant impact.

**e) No Impact**

With implementation of standard water pollution control BMPs, PF-HYD-1, and PF-HYD-2, the Project would not conflict with, or obstruct, implementation of a water quality control plan or suitable groundwater management plan. There would be no impact.

## PROJECT FEATURES

Caltrans would incorporate the following standard project features into the Project to reduce potential impacts to hydrology and water quality:

- **PF-HYD-1: Implementation of Construction-site Best Management Practices.** BMPs would be included in the final Project plans and SSPs would be included in the final construction package to comply with the conditions of the Caltrans NPDES permit. The Caltrans Best Management Practice Guidance Handbook would provide guidance for provisions to be included in the construction contract for measures to protect ESAs and avoid or minimize stormwater and non-stormwater discharges. Construction-site BMPs for stormwater may include, but are not limited to, the following:
  - Construction tracking control practices
  - Job site management
  - Sediment control (fiber rolls and silt fencing)
  - Waste management and construction materials pollution control
  - Construction materials stockpile management
  - Dust and wind erosion controls
  - Drainage inlet protection
  - Non-stormwater management
  - Water quality monitoring
- **PF-HYD-2: Water Pollution Control Program.** A WPCP would be prepared by the contractor and approved by Caltrans, pursuant to 2018 Caltrans Standard Specifications Section 13, Water Pollution Control, and the Caltrans WPCP Preparation Manual, and implemented prior to the beginning of construction.



### 3.3.11 Land Use and Planning

Would the Project:

Question	CEQA Determination
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR LAND USE AND PLANNING

The Project is located along SR 116 between PM 19.90, near the unincorporated city of Cotati, and PM 33.37, near the community of Forestville, just west of Santa Rosa, in Sonoma County. The Project is located within Russian River and Sebastopol and Environs Planning Areas of the Sonoma County General Plan (Sonoma County 2016).

#### **a and b) No Impact**

The Project would not physically divide an established community and complies with the stated goals of the Sonoma County General Plan, including goals for the land use element and the circulation and transit element (Sonoma County 2016). Therefore, there would be no impact.

**3.3.12 Mineral Resources**

Question	CEQA Determination
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

**CEQA SIGNIFICANCE DETERMINATIONS FOR MINERAL RESOURCES**

The California Geological Survey (CGS) designates the Project as occurring within Mineral Resource Zone (MRZ) Category 1, which is defined as “Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources” (Miller and Busch 2013).

**a and b) No Impact**

Construction-related activities are limited to previously disturbed areas, are not expected to disturb mineral resources, if present, and would not result in the loss of availability of a known mineral resource or locally important mineral resource recovery site. Therefore, no impact would occur.

**3.3.13 Noise**

Would the Project result in:

Question	CEQA Determination
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?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact
c) For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	No Impact

**CEQA SIGNIFICANCE DETERMINATIONS FOR NOISE**

Three residential structures and/or light commercial properties are located within approximately 500 feet of the Jones Creek, Blucher Creek, and Gossage Creek bridges. The nearest sensitive receptor to the Jones Creek Bridge is a residential property approximately 250 feet southwest, the nearest to the Blucher Creek Bridge is an industrial property approximately 330 feet northeast, and the nearest to the Gossage Creek Bridge is a residential property approximately 120 feet south.

**a) Less Than Significant Impact**

There are sensitive receptors in areas where construction-related activities are proposed. The Project would potentially expose noise-sensitive receptors to a short-term increase in noise levels during construction, but the increase would be temporary. Noise associated with construction is controlled by Caltrans Standard Specification Section 14-8.02, Noise Control, which limits maximum hourly noise levels ( $L_{max}$ ) to 86 A-weighted decibels (dBA) at 50 feet from a project from 9 p.m. to 6 a.m.

Because construction noise levels may exceed 86 dBA during nighttime work, PF-NOISE-1, as presented in this section, includes measures to reduce construction noise and conduct public outreach to nearby noise-sensitive receptors. Therefore, a less than significant impact would occur.

The Project would not change SR 116 transportation capacity; therefore, a permanent increase in traffic noise levels due to increase in traffic volumes would not occur.

In addition, the Project would not permanently increase ambient noise levels above existing conditions and construction noise would be temporary, resulting in a less than significant impact.

**b and c) No Impact**

Construction of the Project would not require vibratory or impact pile driving. There would be no impact from excessive groundborne vibration.

There are no airports or private airstrips within 2 miles of the Project, and therefore would not expose people residing or working in the Project area to excessive noise levels. There would be no impact.

**PROJECT FEATURES**

Caltrans would incorporate the following standard project feature into the Project to reduce potential impacts to noise:

- **PF-NOISE-1, Construction Noise Levels:** The following measures would be implemented to reduce noise levels during construction where feasible:
  - Any operation exceeding 86 dBA would not be allowed at nighttime from 9 p.m. to 6 a.m.
  - Public outreach would be required throughout the Project to update residents, businesses, and others regarding upcoming construction-related activities and Project schedule.
  - Noisy operations would be scheduled within the same time frame where feasible. The total noise level would not be significantly greater than the level produced if operations are performed separately.
  - Unnecessary idling of internal combustion engines would be avoided within 100 feet of sensitive receptors.
  - All stationary noise-generating construction equipment would be located as far as practical from noise-sensitive receptors, or baffled housing or sound aprons for equipment provided when sensitive receptors adjoin or are near a Project construction area.

- All internal combustion engine driven equipment would be equipped with manufacturer recommended intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Quiet air compressors and other quiet equipment would be used where such technology exists.
- No construction equipment would be delivered and dropped off before 6 a.m.
- All internal combustion engines would be properly maintained to minimize noise generation.

### 3.3.14 Population and Housing

Would the Project:

Question	CEQA Determination
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR POPULATION AND HOUSING

##### a, b) No Impact

The Project would not induce population growth because it does not increase the capacity of SR 116, remove barriers to future growth, or increase population or housing growth (or demand for new housing, utilities, or public services). The Project would not induce substantial population growth, displace housing, or displace people; therefore, there would be no impact.

**3.3.15 Public Services**

Question	CEQA Determination
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection?	No Impact
Police protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

**CEQA SIGNIFICANCE DETERMINATIONS FOR PUBLIC SERVICES**

**a) No Impact**

The Project would not result in the substantial alteration of government facilities in the Project corridor, such as fire and police protection, schools, parks, or other public facilities, nor trigger the need for new government facilities or alter the demand for public services. A TMP would be prepared (PF-TRANS-1, as presented in Section 3.3.17). Therefore, police, fire, and medical services would not be adversely affected by the proposed Project. There would be no impact.

### 3.3.16 Recreation

Question	CEQA Determination
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR RECREATION

There are no recreational facilities within the Project limits. The nearest public park is Forestville Downtown Oaks Park, located approximately 0.4 mile northwest of the Jones Creek Bridge.

#### **a and b) No Impact**

The Project would not directly or indirectly increase use of existing recreational facilities such that substantial deterioration of the facilities would occur. The Project would not require the construction of additional recreational facilities. There would be no impact.



**3.3.17 Transportation**

Would the Project:

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

**CEQA SIGNIFICANCE DETERMINATIONS FOR TRANSPORTATION**

SR 116 is a two-lane conventional highway that serves as a primary route for communities, tourism, and agricultural areas located along the Russian River Valley. The existing SR 116 roadway consists of two 11-foot-wide to 12-foot-wide lanes with shoulders ranging from 1 foot to 8 feet wide depending on location. The Project would upgrade and replace approximately 430 feet of existing bridge railings systems to current Caltrans standards at three bridges. The Project would not increase the transportation capacity of SR 116, nor would it permanently alter the circulation system, and would have no temporary or permanent impact on VMT.

**a) Less Than Significant Impact**

The Project would conflict with the *District 4 Pedestrian Plan for the Bay Area* (Pedestrian Plan) (Caltrans 2022f), which analyzed existing pedestrian travel and potential future improvements on SR 116. On SR 116 within the Project limits, the Pedestrian Plan identified the Jones Creek Bridge as being located within a Mid-Tier location, while the Blucher Creek and Gossage Creek bridges are located in Low-Tier locations. The Project would not improve pedestrian facilities within the Project corridor and therefore would not address needs identified in the Pedestrian Plan.

The Project would conflict with the *Caltrans District 4 Bike Plan for the San Francisco Bay Area* (Bike Plan) (Caltrans 2018), which analyzed existing bicycle travel and potential future improvements on SR 1, and the Sonoma County Transportation Authority (SCTA) *SCTA Countywide Bicycle and Pedestrian Master Plan* (SCTA Bike and Pedestrian Plan) (SCTA 2014). The Project would not improve

bicycle facilities within the Project limits, and therefore would not address the policies identified in the Bike Plan and the SCTA Bike and Pedestrian Plan.

The Project would conflict with Director's Policy (DP) 37, Complete Streets (Caltrans 2021). DP 37 requires that all Caltrans transportation projects provide "complete streets," which are defined as comfortable, convenient, and connected complete street facilities for people walking, biking, and taking transit or passenger rail, unless an exception is documented and approved. The Project would not provide facilities for people walking or taking transit or passenger rail, and justification would be documented with final approval by the Caltrans District 4 Director.

The Project would not conflict with other programs, plan, ordinances, or policies regarding the circulation system, public transit, and bicycle or pedestrian facilities. As stated in Section 1.2, the purpose of the Project is to upgrade the bridge railing systems at all three locations to current standards and to comply with the FHWA MASH (AASHTO 2012) compliant barrier requirements.

To protect construction workers and the traveling public, traffic control would be in place while construction-related activities are underway. A detailed TMP (PF-TRANS-1, presented at the end of this section) would be developed prior to the beginning of construction to aid in coordinating and providing further safety measures for those accessing the Project corridor during construction. Therefore, impacts would be less than significant.

**b) Less Than Significant Impact**

The Project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). The Project would have less than significant impacts on VMT and transportation during construction because of temporary traffic control, including rolling one-lane closures. The Project would have no permanent impact on VMT and would cause no permanent impacts on transportation. The impact would be less than significant.

**c) No Impact**

The Project would not increase hazards because of a geometric design feature. The Project does not include design features or Project components that would substantially increase hazards. There would be no impact.

**d) Less Than Significant Impact**

The Project would not result in inadequate emergency access. With implementation of PF-TRANS-1, medical and emergency vehicles would be able to continue to use SR 116 and would receive priority for fire, medical, emergency, and law enforcement purposes. The Project has the potential to cause short-term, localized traffic congestion and delays resulting from rolling one-lane closures during construction. Detours are not anticipated to be required during construction. Therefore, impacts would be less than significant.

**PROJECT FEATURES**

Caltrans would incorporate the following project feature to reduce potential impacts to transportation:

- **PF-TRANS-1: Transportation Management Plan:** A TMP would be prepared by Caltrans prior to the beginning of construction and in consultation with the appropriate agencies to aid in coordinating and providing further safety measures for those accessing the Project corridor during construction. The TMP would identify traffic delays and alternative routes for emergency and medical vehicles associated with essential services, thereby avoiding or minimizing short-term, localized traffic congestions and delays. Notifications and instructions for rapid response or evacuation in the event of an emergency would be provided.

### 3.3.18 Tribal Cultural Resources

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Question	CEQA Determination
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less Than Significant Impact

#### CEQA SIGNIFICANCE DETERMINATIONS FOR TRIBAL CULTURAL RESOURCES

##### a) **No Impact**

As stated in Section 3.3.5, Cultural Resources, no historic built resources were identified within the APE. There would be no impact on historic built resources.

##### b) **Less Than Significant Impact**

To comply with Section 106 of the National Historic Preservation Act and Assembly Bill 52, Caltrans initiated consultation with all tribal contacts provided by the NAHC on March 7, 2022. One response was received during a meeting with the Graton Rancheria on March 17, 2022, indicating that the Tribe did not need to attend cultural fieldwork scheduled later in March but that the Tribe would like to be kept informed of the results of the fieldwork. Consultation is ongoing with the Tribe throughout the life of the Project.

Caltrans OCRS determined that one cultural (archaeological) resource was identified within the APE and will be protected in its entirety from any potential effects through the establishment of an ESA, in accordance with PA Stipulation VIII.C.5 (Caltrans 2022b). Therefore, the Project would have a less than significant impact on tribal cultural resources. Caltrans would incorporate PF- CULT-1, PF-CULT-2, and AMM-CULT-1 (Section 3.3.5) to reduce impacts to tribal cultural resources.

## PROJECT FEATURES

Caltrans would incorporate the following project features to reduce impacts to cultural resources:

- **PF-CULT-1: Cease Work Upon Discovery of Cultural Resources.** Cease work if cultural resources are encountered during Project-related ground-disturbing activities, have a qualified archaeologist assess the significance of the resource, and implement appropriate avoidance or treatment measures, in coordination with local consulting tribes.

If buried cultural materials are encountered during construction, work would be stopped until a qualified archaeologist can evaluate the nature and significance of the find. The need for archaeological and Native American monitoring during the remainder of the Project would be reevaluated by Caltrans Archaeologists and local consulting tribes as part of the treatment measure determination. The archaeologist would consult with appropriate Native American representatives in determining suitable treatment for unearthed cultural resources if the resources are Native American in nature.

- **PF-CULT-2: Stop Work Upon Discovery of Human Remains.** In accordance with the California Health and Safety Code, if human remains are uncovered during construction-related activities, all such activities within a 60-foot radius of the find will be halted immediately and the Project's designated representative will be notified. The contractor or lead person on the Project will immediately notify the OCRS Office Chief and/or the District Native American Coordinator (DNAC). Once the remains are determined human, the lead person, OCRS Office Chief, or DNAC will contact the County Coroner and the NAHC. Although the Coroner has the ultimate responsibility to contact the NAHC, Caltrans OCRS contacts the NAHC at this time to provide information on the discovery and to assure the NAHC that appropriate action is being taken. The Coroner is required to examine the discovery of human remains within 48 hours of received notification of such a discovery on private or state lands (California Health and Safety Code Section 7050.5[b]). If the Coroner inspects the remains and determines that the remains are not Native American and/or determines they are a result of a wrongful death, the Coroner may take possession of the remains for further inquiry, release them to next of kin, or order the body to be reinterred. After the above action has been taken, work may resume on the Project. If the Coroner determines that the remains are those of a Native American, he or she

must contact the NAHC by phone within 24 hours of making the determination (California Health and Safety Code Section 7050.5[c]). The Project's designated representative will be responsible for acting upon notification of discovery of Native American human remains, as identified in detail in California Public Resources Code Section 5097.9. The Project's designated representative and the professional archaeologist will contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the property owner and Caltrans, will determine the ultimate disposition of the remains. The lead person ensures that the recommendations are followed. After the appropriate actions are taken, Project work may resume.

#### **AVOIDANCE AND MINIMIZATION MEASURES**

Caltrans would incorporate the following AMMs into the Project to avoid and/or minimize potential impacts to cultural resources:

- **AMM-CULT-1: Establish and Enforce ESAs.** Archaeological ESAs will be delineated on the plans and described in the specifications. Appropriate protective measures including demarcations with flags or high-visibility spray paint, access restrictions, and monitoring of the ESA boundaries by a qualified archaeologist and local tribal representatives will be implemented during construction.

**3.3.19 Utilities and Service Systems**

Would the Project:

Question	CEQA Determination
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?	Less Than Significant Impact
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	No Impact
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

**CEQA SIGNIFICANCE DETERMINATIONS FOR UTILITIES AND SERVICE SYSTEMS**

The nearest landfill to the Project corridor is the Republic Services of Sonoma County Guerneville Transfer Station (13450 Pocket Drive, Guerneville, CA 95446). The need for potholing and relocation of existing utilities, if any, would be ascertained during the Project's design phase, following the completion of the verification process. Utility relocations would occur prior to the beginning of construction and in consultation with the utility providers.

**a) Less Than Significant Impact**

The Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electrical power, or natural gas facilities. The Project is not anticipated to require utility relocations for gas, water, and sewer systems. However, the Project is anticipated to require the relocation of a fire hydrant south of the westbound lane of SR 1 at Jones Creek Bridge. Utility verification is anticipated to be required for the Project and would occur during the design phase to confirm the need for utility relocations. If needed, utility relocations would occur prior to the beginning of construction and in consultation with utility providers (AMM-UTIL-1, presented at the end of this section). Therefore, impacts to utilities would be less than significant.

**b, c, d, and e) No Impact**

The Project would not require the services of a landfill where the Project would impact its capacity. The Project would not exceed wastewater treatment requirements. The Project would not require water supplies to serve the Project from existing entitlements or where the Project would impact new or expanded entitlements. The Project would not require the services of a wastewater treatment provider where the Project would impact the provider's capacity. All construction-related waste would be properly disposed of or recycled at an approved facility in compliance with both Caltrans Standard Specification 14-11, Hazardous Waste and Contamination (PF-HAZ-1 [Section 3.3.9]), and the requirements of the facility to which the construction-related waste is hauled. Construction-related activities would comply with all federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, there would be no impact.

**AVOIDANCE AND/OR MINIMIZATION MEASURES**

Caltrans would incorporate the following AMM to avoid and/or minimize potential impacts to utilities and service systems:

- **AMM-UTIL-1: Utility Notifications.** During the PS&E phase, Caltrans would coordinate with all affected utility companies regarding the construction schedule for the Project so that relocations can be conducted by each utility company as necessary prior to the start of construction.



**3.3.20 Wildfire**

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

Question	CEQA Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Less Than Significant Impact

**CEQA SIGNIFICANCE DETERMINATIONS FOR WILDFIRE**

The Project is located along a State Responsibility Area and the Project is not within a very high or high severity fire area (CAL FIRE 2008, 2022a, 2022 b). The Sonoma County Fire District and volunteer fire companies operating through the County of Sonoma Emergency Readiness, Response and Recovery, as well as CAL FIRE, provide fire suppression, rescue, and emergency services within the Project corridor (Sonoma County 2022a).

The County of Sonoma Emergency Readiness, Response and Recovery, along with incorporated cities, have established standardized evacuation zones that will remain consistent for multiple incidents (Sonoma County 2022b). The Evacuation annex to the Sonoma County Operational Area Emergency Operations Plan (Sonoma County 2021) notes that evacuation routes would be selected by law enforcement officials and approved at the time of the evacuation decision. Evacuation routes may include interstate, state and surface roads (like SR 116) and would be chosen based on the relative safety of highway infrastructure and current traffic conditions (Sonoma County 2021).

**a and d) Less Than Significant Impact**

A TMP (PF-TRANS-1), as discussed in Section 3.3.17, would be prepared prior to the beginning of construction and in consultation with the appropriate agencies to

avoid or minimize potential impacts to transportation, and to aid in coordinating and providing safety measures for those accessing SR 116 within the Project limits during construction. Such agencies can include the SCTA, SCTA Paratransit Services, Sonoma County School Districts, the Sonoma County Office of Education, public transportation providers from neighboring jurisdictions including cities and counties, Golden Gate Highway and Transportation District, and/or private sector transportation providers (Sonoma County 2021).

The TMP would include public information and press releases to notify and inform motorists, local businesses, community groups, local entities, emergency services, and local officials of upcoming closures and detours (if needed). In addition, the TMP would include various elements such as portable message signs, ground-mounted signs, and a Construction Zone Enhanced Enforcement Program (COZEEP) to minimize delays and alleviate inconveniences to the traveling public. Emergency, wildfire, law enforcement and medical personnel associated with essential public services would be prioritized, and notifications and instructions for rapid response or evacuation in the event of an emergency would be provided to them. The Project would require rolling one-lane closures during construction.

In the event of a wildfire, the TMP would be implemented. The Project would not exacerbate wildfire risks or expose people or structures to significant risks. Therefore, the Project would have a less than significant impact.

**b and c) No Impact**

Where the Project would extend outside of Caltrans ROW, TCEs would be required. The Project would not expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, nor would it require the installation of associated infrastructure that would exacerbate fire risk. There would be no impact.

**3.3.21 Mandatory Findings of Significance**

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

**CEQA SIGNIFICANCE DETERMINATIONS FOR MANDATORY FINDINGS OF SIGNIFICANCE**

**a) Less Than Significant Impact**

One archaeological site was identified within the APE. It was determined that all construction-related activities have been placed outside the boundaries of sites with known cultural resources, and ESAs would be established to protect these resources in addition to monitoring the ESAs to ensure compliance. Consultation with the Graton Rancheria is ongoing throughout the life of the Project.

The Project would also result in other temporary, minor, and construction-related impacts. Project features and AMMs (Appendix C) would reduce, avoid, and/or minimize impacts to less than significant levels.

**b) No Impact**

A review of projects in the vicinity of the Project determined that no past, present, or future projects would pose a cumulative effect together with implementation of the Project. For biological resources, no cumulative impacts are anticipated due to the implementation of the project features and AMMs as summarized in Appendix C.

With respect to population and housing, the Project would not be growth-inducing. With respect to land use and planning, the Project is generally consistent with State Scenic Highway Program, Sonoma County General Plan 2020 (Sonoma County

2016), and the Guidelines. With these considerations, the Project would not have cumulative impacts, therefore there would be no impact.

**c) Less Than Significant Impact**

The Project would have no impact on agriculture and forest resources, geology and soils, land use and planning, mineral resources, population and housing, public services, and recreation. The Project would potentially affect aesthetics, air quality, biological resources, cultural resources, energy, GHG emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation, tribal cultural resources, utilities and service systems, and wildfire. However, with implementation of project features and AMMs, these potential impacts would be reduced, avoided, and/or minimized to a less than significant level. Construction-related activities would temporarily increase criteria air pollutant emissions, ambient noise levels, and emergency response times and the Project would incorporate project features and AMMs to reduce, avoid, or minimize potentially adverse effects to humans. Therefore, the Project would not have a substantial direct or indirect impact on the human environment. Impacts would be less than significant.

# Chapter 4 Community Outreach and Consultation and Coordination with Public Agencies

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The following sections present public and agency coordination to date.

## 4.1 Community Outreach

This IS/ND, maps, and Project information are available to download at the [District 4 Environmental Documents by County](https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs) website (https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs). In addition, a hardcopy of this IS/ND will be made available at the following locations in the vicinity of the Project:

- Forestville Library  
7050 Covey Road  
Forestville, CA 95436
- Sebastopol Regional Library  
7140 Bodega Avenue  
Sebastopol, CA 95472
- Rohnert Park - Cotati Regional Library  
6250 Lynne Condé Way  
Rohnert Park, CA 94928

The deadline for submission of comments on this IS/ND is July 29, 2023.

## 4.2 Consultation and Coordination with Public Agencies

Consultation with agencies occurred during the Project Approval & Environmental Document phase. A list of coordination activities and contacts is provided in Table 4-1.

**Table 4-1. Agency Coordination Meetings and Contacts**

Organization(s)	Date	Topic
NAHC	December 14, 2021	Caltrans contacted the NAHC and requested a review of their SLF. The results of the SLF were positive and a list of Native American contacts with potential interest or information regarding the APE was provided.



## Chapter 5 List of Preparers and Reviewers

The primary people responsible for preparing and reviewing this IS/ND are summarized in Table 5-1.

**Table 5-1. List of Preparers and Reviewers**

Organization	Name	Role
Caltrans	Maxwell Lammert	Office Chief (Acting), Office of Environmental Analysis
Caltrans	Arnica MacCarthy	Senior Environmental Planner, Office of Environmental Analysis
Caltrans	Brooklyn Klepl	Environmental Scientist, Office of Environmental Analysis
Caltrans	Chris Pincetich	Branch Chief (Acting), Office of Biological Sciences and Permits
Caltrans	Robert Blizard	Branch Chief, Office of Environmental Studies and Permits
Caltrans	Lindsay Vivian	Office Chief (Acting), Office of Biological Sciences and Permits
Caltrans	Jonathan Hogg	Environmental Scientist, Office of Biological Sciences and Permits
Caltrans	Helen Blackmore	Branch Chief, Office of Cultural Resource Studies
Caltrans	Althea Asaro	Branch Chief (Acting), Office of Cultural Resource Studies
Caltrans	Shilpa Mareddy	Branch Chief, Office of Environmental Engineering
Caltrans	Chris Wilson	District Branch Chief, Office of Environmental Engineering
Caltrans	Chris Riden	Branch Chief, Office of Geotechnical Design – West
Caltrans	Kathleen Reilly	District Branch Chief, Office of Hydraulic Engineering
Caltrans	Nghia Nguyen	Hydraulic Engineer, Office of Hydraulic Engineering
Caltrans	Alex McDonald	Branch Chief, Office of Landscape Architecture – North
Caltrans	Wesley Bexton	Landscape Architecture Associate, Office of Landscape Architecture
Caltrans	Carlos Mora	Branch Chief, Office of Water Quality
Caltrans	Jannelle Hardzeichyk	Water Quality Engineer, Office of Water Quality
Caltrans	Jim Murphy	Right of Way Agent, Office of Right of Way Acquisitions & Project Management Services
Caltrans	Alexander Lim	Project Manager, Project Management North
Caltrans	Jonathan Lee	Project Engineer, Office of Design Support
Caltrans	Joy Cheung	Construction Manager, Office of North Bay Construction
Jacobs	Rachel Cotroneo	Senior Biologist

<b>Organization</b>	<b>Name</b>	<b>Role</b>
Jacobs	Sean O'Neil	Biologist
Jacobs	Erik Lauritzen	Environmental Planner
Jacobs	Loretta Meyer	Senior Environmental Planner
Jacobs	Chris Archer	Geospatial Professional
Jacobs	Clarice Ericsson	Senior Publications Technician
Jacobs	Bryan Bell	Senior Technical Editor
Jacobs	Leslie O'Connor	Technical Editor



# **Chapter 6** Circulation List

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This Draft IS/ND will be circulated by June 30, 2023, to the agencies and elected officials listed in the following sections.

## **6.1 Agencies**

- Bay Area Air Quality Management District  
375 Beale Street, Suite 600  
San Francisco, CA 94105
- California Department of Fish and Wildlife  
2825 Cordelia Road, Suite 100  
Fairfield, CA 94534
- California Department of Parks and Recreation  
P.O. Box 123  
Duncan Mills, CA 95430-0123
- California Transportation Commission  
1120 N Street, MS 52  
Sacramento, CA 95814
- Governor's Office of Planning and Research  
1400 Tenth Street  
Sacramento, CA 95814
- North Coast Regional Water Quality Control Board  
5550 Skylane Boulevard, Suite A  
Santa Rosa, CA 95403-1072
- Sonoma County Planning Division  
2550 Ventura Avenue  
Santa Rosa, CA 95403
- Sonoma County Transportation Authority  
411 King Street  
Santa Rosa, CA 95404
- State Water Resources Control Board

1001 I Street

Sacramento, CA 95814

- U.S. Fish and Wildlife Service  
2800 Cottage Way, Suite W-2605  
Sacramento, CA 95825
- U.S. Army Corps of Engineers  
450 Golden Gate Ave, 4th Floor  
San Francisco, CA 94102

## **6.2 Elected Officials**

- The Honorable Dianne Feinstein
- The Honorable Alex Padilla
- The Honorable Jared Huffman (CA-2)
- The Honorable Mike McGuire (SD 2)
- The Honorable Jim Wood (District 2)
- The Honorable Supervisor Lynda Hopkins (District 5)

# **Appendix A** Figures

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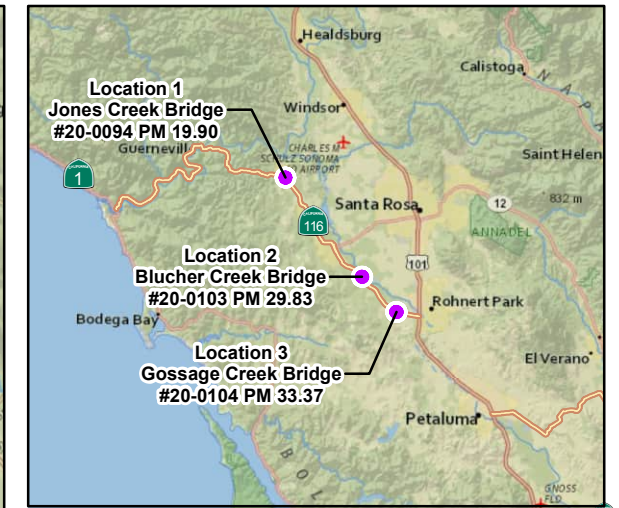




\\DC1V501GIS\PROJ\CALTRANS\0420\_SON116\_BRIDGE\_RAILSMAPFILES\REPORT\2023\PID05\_MAY\FIG-1- REGIONAL\_LOCATION\_2020.MXD\_CARCHER.5/31/2023

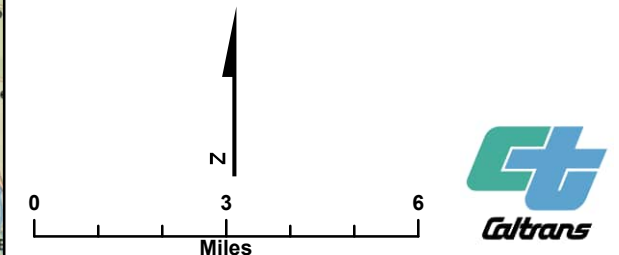


**Basemap Source:**  
ESRI, USGS The National Map, National Geographic



**LEGEND**

 Project Footprint

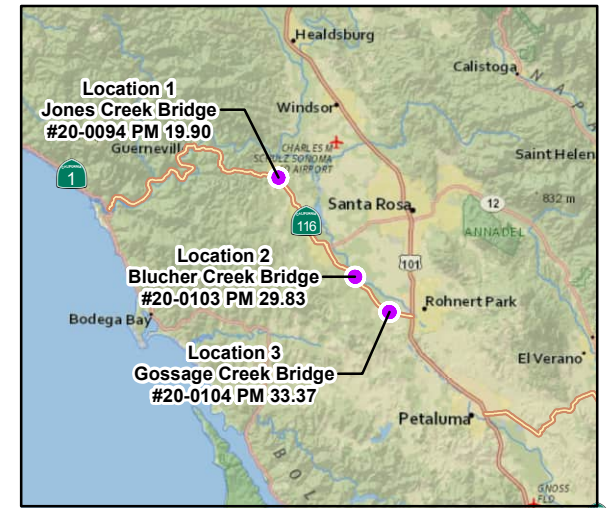
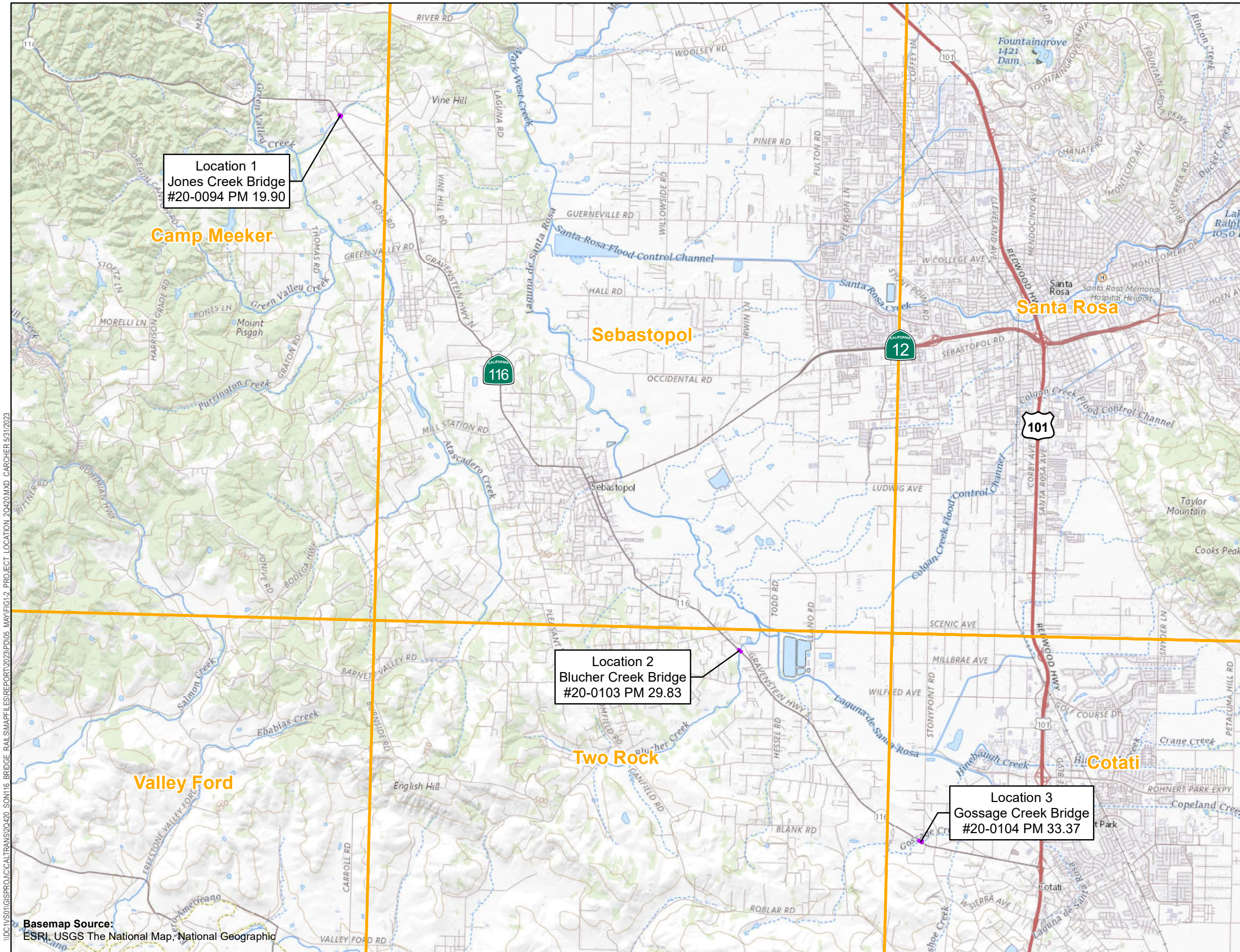


**Figure 1-1**  
**Regional Location**  
State Route 116  
Bridge Railings Replacement Project  
EA 04-2Q420, SON-116-19.9/33.4  
Sonoma County, California



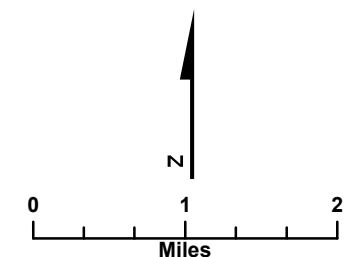






**LEGEND**

- Project Footprint
- USGS 7.5 Minute Quadrangle



**Figure 1-2  
Project Location**  
State Route 116  
Bridge Railings Replacement Project  
EA 04-2Q420, SON-116-19.9/33.4  
Sonoma County, California

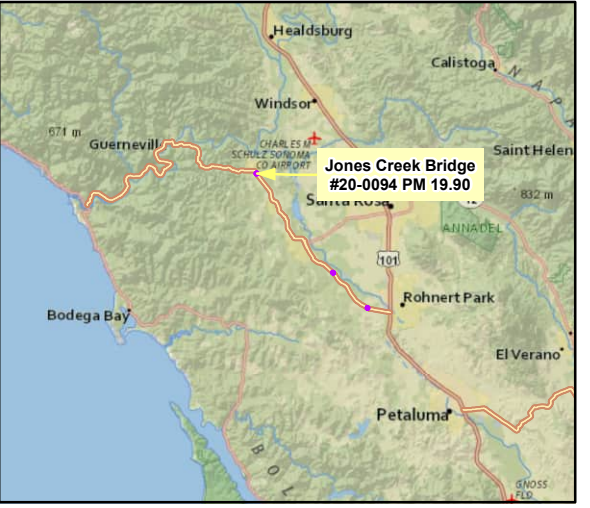
I:\DC\15\01\GIS\PROJ\CALTRANS\0420\_SON116\_BRIDGE\_RAILING\FILES\REPORT\2023\FIG-1-2\_PROJECT\_LOCATION\_202401.MXD CARPHER 5/31/2023

**Basemap Source:**  
ESRI, USGS The National Map, National Geographic





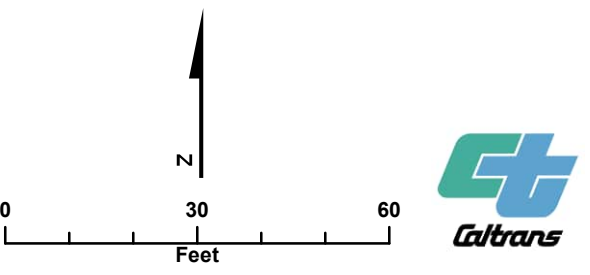




**LEGEND**

- Post Miles
- - - Caltrans Right of Way
- Sonoma County Parcels
- ← Stream Centerline
- Project Footprint (0.55 acre)
- Cleanout Culvert
- Remove and Reconstruct Existing Overhang, Remove MBGR, and Replace Concrete Barrier
- Replace 24" Culvert
- ▨ Temporary Construction Easement / Staging Area
- Temporary Construction Easement
- - - Replace MGBR with MGS
- ⊠ Construct Concrete Anchor

Imagery Source:  
Sonoma County 2021

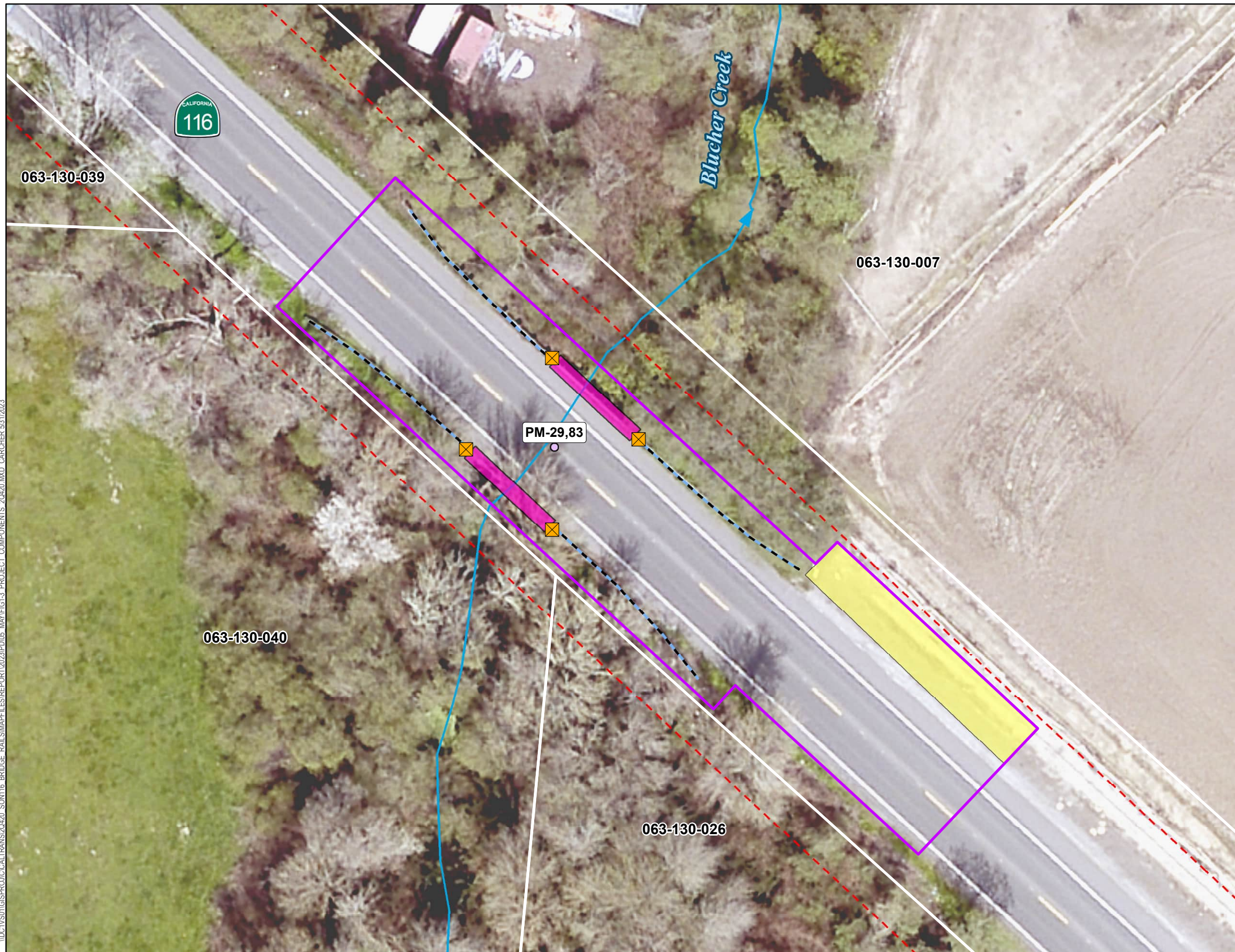


**Figure 1-3**  
**Map 1 of 3**  
**Jones Creek Bridge**  
**Project Components**  
 State Route 116  
 Bridge Railings Replacement Project  
 EA 04-2Q420, SON-116-19.9/33.4  
 Sonoma County, California

I:\DC\1\5\01\GIS\PROJECT\CALTRANS\2020\SON116 BRIDGE RAILING\PROJECT\REPORT\2020\FIG1-3 PROJECT COMPONENTS 20420.MXD\_CARCHER 5/31/2023



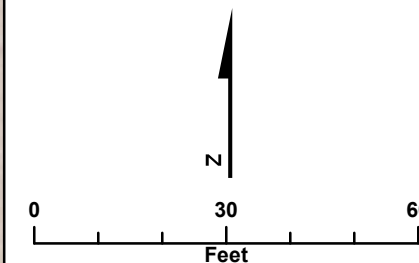
\\DC1V501GIS\PROJ\CALTRANS\2023\SON116 BRIDGE RAIL\MAPFILES\REPORT\2023\FIG-13 PROJECT COMPONENTS 20420.MXD\_CARCHER 5/31/2023



**LEGEND**

- Post Miles
- - - Caltrans Right of Way
- ▭ Sonoma County Parcels
- ← Stream Centerline
- ▭ Project Footprint (0.33 acre)
- ▭ Widen Bridge and Upgrade Bridge Railing
- ▭ Staging Area
- - - Replace MGBR with MGS
- ⊠ Construct Concrete Anchor

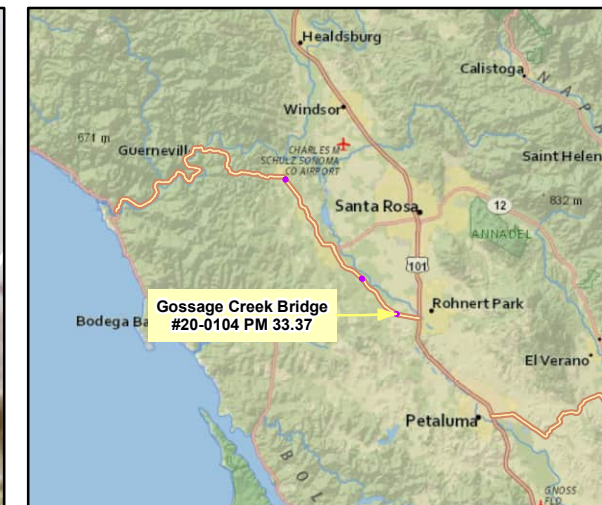
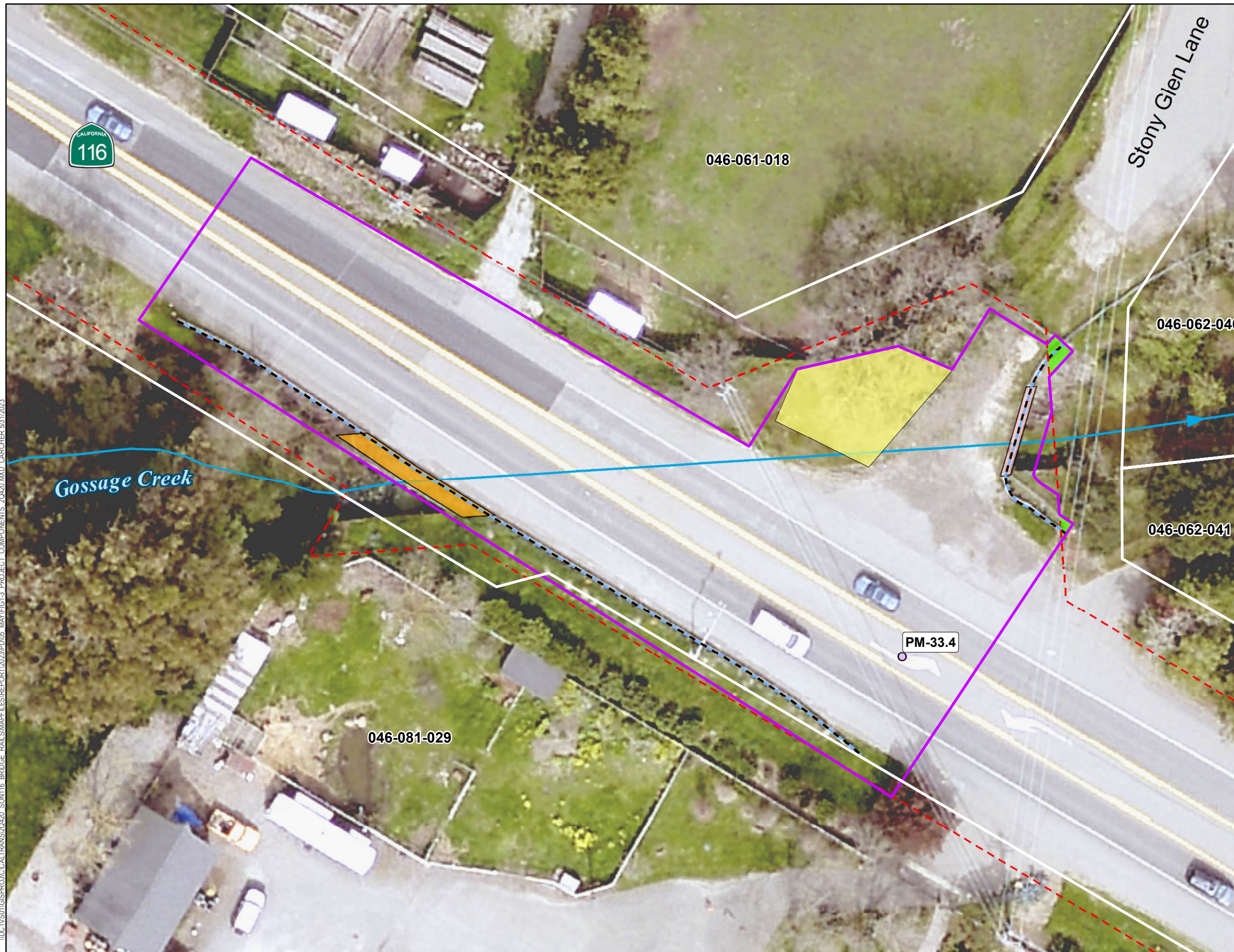
Imagery Source:  
Sonoma County 2021



**Figure 1-3**  
**Map 2 of 3**  
**Blucher Creek Bridge**  
**Project Components**  
 State Route 116  
 Bridge Railings Replacement Project  
 EA 04-2Q420, SON-116-19.9/33.4  
 Sonoma County, California



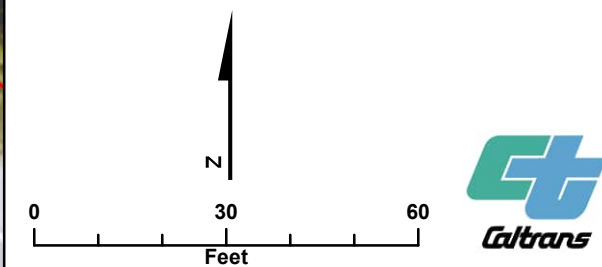
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**LEGEND**

- Post Miles
- - - Caltrans Right of Way
- ▭ Sonoma County Parcels
- ← Stream Centerline
- ▭ Project Footprint (0.54 acre)
- ▨ Hardscaping
- ▭ Remove and Reconstruct Top Edge of Box Culvert, Remove MBGR, and Repace Concrete Barrier
- ▭ Staging Area
- ▭ Temporary Construction Easement
- - - Replace MGBR with MGS

Imagery Source:  
Sonoma County 2021



**Figure 1-3**  
**Map 3 of 3**  
**Gossage Creek Bridge**  
**Project Components**  
 State Route 116  
 Bridge Railings Replacement Project  
 EA 04-2Q420, SON-116-19.9/33.4  
 Sonoma County, California





# **Appendix B** Title VI Policy Statement

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## 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](http://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](mailto:Title.VI@dot.ca.gov).

A handwritten signature in black ink, appearing to read 'Tony Tavares'.

TONY TAVARES  
Director





# Appendix C Summary of Project Features, and Avoidance and Minimization Measures

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## Project Features

- **PF-AES-1: Construction Equipment and Material Storage.** Construction equipment and materials should be stored in screened staging areas beyond the direct view of the traveling public to the extent feasible.
- **PF-AES-2: Nightwork.** For nightwork, limit construction lighting to the Project footprint for construction-related activities, and use directional lighting, shielding, and other measures as needed to minimize light trespass to the traveling public.
- **PF-AES-3: Vegetation Impacts and Protection.** Reduce impacts to vegetation to the greatest extent possible while allowing the Project to be implemented. Vegetation to remain should be protected from construction activities by temporary fencing when vegetation is close to construction-related activities.
- **PF-AES-4: Temporary Fencing.** Use temporary fencing to protect the roots and canopies of nearby trees from construction-related activities.
- **PF-AES-5: Revegetate Disturbed Areas.** Revegetate disturbed areas with regionally appropriate, commercially available, native seed mix.
- **PF-AQ-1: Dust Control Measures.** Implement dust control measures to minimize airborne dust and soil particles generated from construction-related activities, including watering or applying dust palliative to disturbed areas, preventing and promptly removing trackouts on SR 116 and other public roadways affected by construction traffic, and covering soils or construction materials or providing adequate freeboard (space from the top of the material to the top of the truck) during transport.
- **PF-AQ-2: Construction Vehicles and Equipment.** Maintain and tune the construction vehicles and equipment in accordance with manufacturer's specifications.
- **PF-AQ-3: Limit Idling.** Limit idling times either by shutting construction equipment off when not in use or reducing the maximum idling time to 5 minutes.

- **PF-BIO-1: Environmentally Sensitive Area Fencing.** Prior to the initiation of construction, the boundaries of the described construction footprint would be clearly delineated using high-visibility orange fencing. The fencing would remain in place throughout the Project duration and would prevent construction equipment or personnel from entering environmentally sensitive areas or areas that were not analyzed for ground-disturbing actions. The final Project plans would depict the locations where fencing would be installed and how it would be assembled or constructed. The special provisions in the bid solicitation package would clearly describe acceptable fencing material, prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface disturbing activities.
  
- **PF-BIO-2: Construction Work Windows.** Where feasible, construction adjacent to the creeks or on the bridges would be restricted to the dry season, during low creek flows, starting June 1 and ending October 31. Any construction work would be limited to when the creek is dry or when a TCDS is installed. When feasible, advance vegetation trimming or removal is expected to occur outside of the bird nesting season (February 1 through September 30).
  
- **PF-BIO-3: Wildlife Exclusion Fencing (WEF).** Before starting construction, at the discretion of the Caltrans biologist, WEF would be installed along the Project footprint perimeter in the areas where wildlife could enter the Project footprint. The WEF would be removed following completion of construction activities. At the discretion of the Caltrans biologist, WEF may be removed at times when construction is no longer active in the area.
  
- **PF-BIO-4: Worker Environmental Awareness Training.** Prior to ground-disturbing activities, a permitting agency-approved biologist would facilitate a mandatory environmental education program for all construction personnel. Training sessions would be repeated for all new personnel before they are allowed access to the job site. The training would include a minimum of the following:
  - A description of any special-status species, such as CRLF, WPT, CFS, anadromous fish, potential listed plant species, roosting bats, and migratory birds, habitat needs, and habitats with the potential to occur in the BSA.
  
  - How the species might be encountered within the Project area; and an explanation of the status of these species and protection under federal and state regulations.

- A review of the measures to be implemented to conserve listed species and their habitats as they relate to the work site and how the measures reduce effects on the species.
- Boundaries within which construction would occur; and how to best avoid the incidental take of listed species.
- An explanation of applicable federal and state laws protecting endangered species as well as the importance of compliance with Caltrans and various resource agency conditions. The program would also include a discussion of the consequences of noncompliance.
- Forms to be signed by Project personnel upon completion of the training program stating that they attended the program and understand all the project features and AMMs, including consequence of noncompliance. Sign-in sheets would be kept on file and would be available to regulatory agencies upon request. The training and associated material would be available in languages other than English as needed.
- A pamphlet containing photos of CRLF, WPT, CFS, potential listed plants, and anadromous fish, compliance reminders, relevant contact information, including the approved biologist's contact information. The pamphlet would be prepared and distributed to all construction personnel entering the Project area.
- **PF-BIO-5: Pre-construction Bird Surveys.** During the nesting season (February 1 through September 30), pre-construction surveys for nesting birds would be conducted by a qualified biologist no more than 72 hours prior to the start of construction activities. If an active nest is discovered, biologists would establish an appropriate exclusion buffer around the nest (at least 300 feet for raptors and 50 feet for all other species) or in coordination with regulatory agencies. The area within the buffer would be avoided until the young are no longer dependent on the adults or the nest is no longer active. If a nesting special-status bird species is discovered, the biologist would notify the USFWS and/or CDFW for further guidance. Partially constructed and inactive nests may be removed to prevent occupation. Nesting birds near the Project footprint would be regularly monitored for signs of disturbance. To the extent feasible, tree removal would not occur during the nesting season.

- **PF-BIO-6: Avoidance of Entrapment.** To prevent inadvertent entrapment of CRLF and other wildlife during construction:
  - Excavated, steep-walled holes or trenches more than 1 foot deep would be covered at the close of each working day using plywood or similar materials or provided with at least one escape ramp constructed of earth fill or wooden planks. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Replacement pipes, culverts, or similar structures stored in the Project area overnight would be inspected before they are subsequently moved, capped or buried.
  - Plastic monofilament netting or similar material would not be used to avoid entrapment of CRLF and other wildlife. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
  
- **PF-BIO-7: Implementation of Best Management Practices (BMPs):** A Stormwater Pollution Prevention Plan may be needed depending on the extent of the disturbed soil areas. However, erosion control BMPs will be included in the plans and special provisions to comply with the requirements of the RWQCB General Construction Permit. The Caltrans BMP Guidance Handbook would provide guidance for design staff to include provisions in construction contracts for measures to protect sensitive areas and prevent and minimize stormwater and non-stormwater discharges. Protective measures would include, at a minimum, the following:
  - Disallowing any discharging of pollutants from vehicle and equipment cleaning into any storm drains or watercourses.
  - Keeping vehicle and equipment fueling and maintenance operations at least 50 feet away from watercourses, except at established commercial gas stations or an established vehicle maintenance facility.
  - Storing all grindings and asphaltic-concrete waste within previously disturbed areas absent of habitat and at a minimum of 50 feet from any downstream riparian habitat, aquatic habitat, culvert, or drainage feature, or removed from the site at the end of each day.
  - Designating dedicated fueling and refueling practices as part of the approved Stormwater Pollution Prevention Plan. Dedicated fueling areas would be

protected from stormwater run-on and would be located at least 50 feet from downslope drainage facilities and watercourses. If this is not possible, then fueling would be conducted as stated in the RWQCB General Construction Permit and Caltrans BMP Guidance Handbook.

- Maintaining spill containment kits onsite at all times during construction operations and/or staging or fueling of equipment.
- Implementing dust and erosion control measures consistent with the RWQCB General Construction Permit, and Caltrans BMP Guidance Handbook.
- Protecting graded and designated staging areas consistent with the RWQCB General Construction Permit and Caltrans BMP Guidance Handbook.
- **PF-BIO-8: Construction-site Best Management Practices.** The following site restrictions would be implemented to avoid or minimize potential effects on listed species and their habitats:
  - Project-related vehicle traffic would be restricted to established roads and construction areas. The speed limit of 15 miles per hour in the Project footprint and in unpaved and paved areas would be enforced to reduce dust and excessive soil disturbance.
  - Project personnel would be required to comply with current guidance governing vehicle use, speed limits, fire prevention, and other hazards.
  - Construction access, staging, storage, and parking areas would utilize existing Maintenance Vehicle Pullouts, existing paved areas, gravel shoulder backing, and disturbed areas within the Project limits. Staging and storage areas would be located at least 50 feet from wetlands, the ordinary high-water mark (OHWM) of jurisdictional waters, a concentrated flow of stormwater, a drainage course, or an inlet, unless additional containment efforts are used. Access routes and boundaries of the footprint would be clearly marked prior to initiating construction activities and would be limited to the extent necessary to construct the proposed Project. Only approved areas clearly delineated in the plans may be used for staging and storage.
  - Any borrow material must be certified non-toxic and free of weeds to the maximum extent possible.

- All food-related trash items such as wrappers, cans, bottles, and food scraps would be disposed of in closed containers and removed at least once daily from the Project footprint.
- All pets would be prohibited from entering the Project area during construction to prevent harassment of, injury to, or mortality of sensitive species.
- Firearms would be prohibited within the Project site, except for those carried by authorized security personnel or local, state, or federal law enforcement officials.
- **PF-BIO-9: Replant, Reseed, and Restore Disturbed Areas.** Caltrans would restore temporarily disturbed areas to the maximum extent practicable. Exposed slopes and bare ground would be reseeded with native and appropriate non-invasive grasses and native shrubs to stabilize and prevent erosion. Where disturbance includes the removal of trees and woody shrubs, native species would be replanted at a ratio to be determined in a later Project phase, based on the local species composition.
- **PF-BIO-10: Vegetation Removal.** Vegetation growing in locations due to be graded or where permanent structures would be placed would be cleared. Vegetation would be cleared only where necessary and would be cut above ground level, except in areas that would be excavated. This would allow plants that reproduce to resprout after construction. Clearing and grubbing of woody vegetation would occur by hand or using construction equipment such as mowers, backhoes, and excavators. If clearing and grubbing occur between February 1 and September 30, a qualified biologist would survey for nesting birds within the areas to be disturbed. If an active nest is found, nest buffers would be established as stated in PF-BIO-5.
- **PF-BIO-11: Reduce Spread of Invasive Species.** To reduce the spread of invasive, non-native plant species and minimize the potential decrease of palatable vegetation for wildlife species, Caltrans would comply with Executive Order (EO) 13112. This order is provided to prevent the introduction of invasive species and provide for their control to minimize the economic, ecological, and human health effects. In the event that noxious weeds are disturbed or removed during construction-related activities, the contractor would be required to contain the plant material associated with these noxious weeds and dispose of them in a

manner that would not promote the spread of the species. The contractor would be responsible for obtaining all permits, licenses, and environmental clearances for properly disposing of materials. Areas subject to noxious weed removal or disturbance would be replanted with fast-growing native and appropriate non-invasive grasses or a native erosion control seed mixture. Where seeding is not practical, the target areas within the Project area would be covered to the extent practicable with heavy black plastic solarization material until disturbed areas are restored to pre-construction conditions.

- **PF-BIO-12: Detection and Handling of Listed Species.** If, at any time, a listed species is discovered in the Project area, the Resident Engineer and the agency-approved biologist would be immediately informed. Caltrans would then coordinate with appropriate state and federal agencies or as otherwise authorized in permits. All construction activities within 50 feet of the individual may be suspended. The Project biologist would determine if relocating the species is necessary and would work with the corresponding agency prior to handling or relocating unless otherwise authorized.
- **PF-CULT-1: Cease Work Upon Discovery of Cultural Resources.** Cease work if cultural resources are encountered during Project-related ground-disturbing activities, have a qualified archaeologist assess the significance of the resource, and implement appropriate avoidance or treatment measures, in coordination with local consulting tribes.

If buried cultural materials are encountered during construction, work would be stopped until a qualified archaeologist can evaluate the nature and significance of the find. The need for archaeological and Native American monitoring during the remainder of the Project would be reevaluated by Caltrans Archaeologists and local consulting tribes as part of the treatment measure determination. The archaeologist would consult with appropriate Native American representatives in determining suitable treatment for unearthed cultural resources if the resources are Native American in nature.

- **PF-CULT-2: Stop Work Upon Discovery of Human Remains.** In accordance with the California Health and Safety Code, if human remains are uncovered during construction-related activities, all such activities within a 60-foot radius of the find will be halted immediately and the Project's designated representative will be notified. The contractor or lead person on the Project will immediately

notify the OCRS Office Chief and/or the District Native American Coordinator (DNAC). Once the remains are determined human, the lead person, OCRS Office Chief, or DNAC will contact the County Coroner and the NAHC. Although the Coroner has the ultimate responsibility to contact the NAHC, Caltrans OCRS contacts the NAHC at this time to provide information on the discovery and to assure the NAHC that appropriate action is being taken. The Coroner is required to examine the discovery of human remains within 48 hours of received notification of such a discovery on private or state lands (California Health and Safety Code Section 7050.5[b]). If the Coroner inspects the remains and determines that the remains are not Native American and/or determines they are a result of a wrongful death, the Coroner may take possession of the remains for further inquiry, release them to next of kin, or order the body to be reinterred. After the above action has been taken, work may resume on the Project. If the Coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making the determination (California Health and Safety Code Section 7050.5[c]). The Project's designated representative will be responsible for acting upon notification of discovery of Native American human remains, as identified in detail in California Public Resources Code Section 5097.9. The Project's designated representative and the professional archaeologist will contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the property owner and Caltrans, will determine the ultimate disposition of the remains. The lead person ensures that the recommendations are followed. After the appropriate actions are taken, Project work may resume

- **PF-HYD-1: Implementation of Construction-site Best Management Practices.** BMPs would be included in the final Project plans and SSPs would be included in the final construction package to comply with the conditions of the Caltrans NPDES permit. The Caltrans Best Management Practice Guidance Handbook would provide guidance for provisions to be included in the construction contract for measures to protect ESAs and avoid or minimize stormwater and non-stormwater discharges. Construction site BMPs for stormwater may include, but are not limited to, the following:
  - Construction tracking control practices
  - Job site management
  - Sediment control (fiber rolls and silt fencing)
  - Waste management and construction materials pollution control



- Construction materials stockpile management
- Dust and wind erosion controls
- Drainage inlet protection
- Non-stormwater management
- Water quality monitoring
  
- **PF-HYD-2: Water Pollution Control Program.** A WPCP would be prepared by the contractor and approved by Caltrans, pursuant to 2018 Caltrans Standard Specifications Section 13, Water Pollution Control, and the Caltrans WPCP Preparation Manual, and implemented prior to the beginning of construction.
  
- **PF-NOISE-1, Construction Noise Levels:** The following measures would be implemented to reduce noise levels during construction where feasible:
  - Any operation exceeding 86 dBA would not be allowed at nighttime from 9 p.m. to 6 a.m.
  - Public outreach would be required throughout the Project to update residents, businesses, and others regarding upcoming construction-related activities and Project schedule.
  - Noisy operations would be scheduled within the same time frame where feasible. The total noise level would not be significantly greater than the level produced if operations are performed separately.
  - Unnecessary idling of internal combustion engines would be avoided within 100 feet of sensitive receptors.
  - All stationary noise-generating construction equipment would be located as far as practical from noise-sensitive receptors, or baffled housing or sound aprons for equipment provided when sensitive receptors adjoin or are near a Project construction area.
  - All internal combustion engine driven equipment would be equipped with manufacturer recommended intake and exhaust mufflers that are in good condition and appropriate for the equipment.
  - Quiet air compressors and other quiet equipment would be used where such technology exists.

- No construction equipment would be delivered and dropped off before 6 a.m.
- All internal combustion engines would be properly maintained to minimize noise generation.
- **PF-TRANS-1: Transportation Management Plan:** A TMP would be prepared by Caltrans prior to the beginning of construction and in consultation with the appropriate agencies to aid in coordinating and providing further safety measures for those accessing the Project corridor during construction. The TMP would identify traffic delays and alternative routes for emergency and medical vehicles associated with essential services, thereby avoiding or minimizing short-term, localized traffic congestions and delays. Notifications and instructions for rapid response or evacuation in the event of an emergency would be provided.

## **Avoidance and Minimization Measures**

- **AMM-AES-1: Appearance of Construction Materials.** Minimize appearance of construction equipment and staging areas.
- **AMM-AES-2: Unavoidable Removal of Trees.** Although tree removal is not currently anticipated, if construction work results in the unavoidable removal of existing trees of a diameter breast height (caliper size) of 4 inches or greater, replant trees within the Project limits with native and climatically appropriate species to the extent practicable; provide a minimum of three years of planting establishment for replanted trees.
- **AMM-AES-3: Certified Arborist.** Any pruning of trees must be done under the supervision of a certified arborist to accommodate construction access to the maximum extent practicable, prior to considering any tree removal.
- **AMM-AES-4: Native Topsoil.** Stockpile and re-use native topsoil to the maximum extent practicable, to assist in revegetation success and re-establish native plants present in the native soil.
- **AMM-BIO-1: Rare Plant Pre-construction Surveys/Salvage.** Caltrans would conduct pre-construction, protocol-level surveys for rare plants. Surveys would be conducted during the appropriate blooming time for potentially occurring species and take place prior to the beginning of construction. If special-status plants are found, they would be avoided where feasible and ESA would be designated. If avoiding these plants is not feasible, in coordination with all relevant agencies,

plants in the Project footprint would either be salvaged and replanted into suitable adjacent habitat in the Caltrans ROW or seed or other propagules would be collected for future transplanting. Additional measures may be developed during consultation with regulatory agencies.

- **AMM-BIO-2: Pre-construction Survey for CRLF.** An agency-approved biologist would conduct pre-construction CRLF surveys. Visual encounter surveys would be conducted immediately before ground-disturbing activities. Suitable aquatic and upland habitat within the Project footprint, including refugia habitat such as under shrubs, downed logs, small woody debris, and burrows, would be inspected. If a CRLF is observed, the individual would be evaluated and relocated in accordance with the observation and handling protocol outlined in the following sections. Fossorial mammal burrows would be inspected for signs of frog usage, to the extent practicable. If it is determined that a burrow may be occupied by a CRLF, work would be paused, and relevant agencies would be contacted to determine how to proceed.
- **AMM-BIO-3: Biological Monitoring.** The agency-approved biologist would be present during construction activities where take of a listed species could occur including site preparation activities. Through communication with the Resident Engineer or a designee, the agency-approved biologist may stop work if deemed necessary for any reason to protect listed species and would advise the Resident Engineer or designee on how to proceed accordingly.
- **AMM-BIO-4: Lighting Restrictions.** In the event that nightwork is required, construction personnel would turn portable tower lights on no more than 30 minutes before the beginning of civil twilight, and off no more than 30 minutes after the end of civil sunrise. Portable tower lights would have directional shields attached to them, and personnel would only direct lights downward and toward active construction and staging areas. If future Project plans include the addition of nighttime work, then Caltrans would reassess impacts on sensitive resources.
- **AMM-BIO-5: Rain Events.** The Caltrans biologist would monitor weather and, in coordination with the Resident Engineer, determine which construction activities may need to be halted within 24 hours of a 0.1-inch rain event, or when there is a forecast of 40 percent or more chance of precipitation, to ensure protection of CRLF and other aquatic species. If, by 2 p.m., rain is forecast for the remainder of the day or subsequent night with a 70 percent or greater probability

of rain (based on the nearest National Weather Service forecast, available at <http://forecast.weather.gov>), work may be postponed until 24 hours have passed between the last rain event and the start of work.

- **AMM-BIO-6: Pre-construction Surveys for WPT.** An approved biologist would conduct pre-construction surveys for WPT as needed. A visual encounter survey would be conducted immediately before ground-disturbing activities. Suitable habitat within the Project footprint would be visually inspected. If WPT is found within the Project footprint and at risk of harm, then it would be relocated outside of the Project footprint by the approved biologist.
- **AMM-BIO-7: Limit Removal of Willows and Blackberry from Streambank.** The Project would avoid removal of willows and blackberry located along the side of the creek, to the maximum extent practicable, as the overhanging vegetation may provide limited cover to CFS.
- **AMM-BIO-8: CFS Relocation Plan.** In coordination with CDFW and USFWS, Caltrans would prepare and submit a Temporary Creek Diversion and California Freshwater Shrimp Relocation Plan for the Jones Creek Bridge location to be approved by agencies prior to the start of construction. This plan would include all proper diversion and dewatering BMPs to minimize potential direct impacts to CFS individuals.
- **AMM-BIO-9: Pre-construction Survey for Anadromous Fish:** An agency-approved biologist would conduct a pre-construction visual survey (bank observations). When listed species are present and it is determined that they could be injured or killed by construction activities, a qualified Project biologist would identify appropriate methods for capture, handling, exclusion, and relocation of individuals that could be affected.
- **AMM-BIO-10: Fish Relocation Plan:** In coordination with agencies, Caltrans would develop and submit a Temporary Stream Diversion and Fish Relocation Plan for the Jones Creek work location for approval prior to the start of construction.
- **AMM-BIO-11: Roosting and Pre-construction Bat Surveys.** During the design phase, an approved biologist would conduct surveys for bats and bat habitat in the Project footprint and bat occupancy within the existing bridge structures to determine the presence of bats and the potential for day or night roosting habitat.

At least 48 hours prior to the start of construction, follow-up surveys would also be performed.

- **AMM-BIO-12: Bat Exclusionary Measures.** If design phase surveys reveal occupancy, prior to construction, Caltrans or its contractor would implement bat exclusionary measures, such as filling crevices with expandable foam, on existing bridge structures if deemed necessary by an approved biologist. In addition, these measures must be put in place either between March 1 and April 15 or between August 31 and October 15 to deter maternity roosting.
- **AMM-CULT-1: Establish and Enforce ESAs.** Archaeological ESAs will be delineated on the plans and described in the specifications. Appropriate protective measures including demarcations with flags or high-visibility spray paint, access restrictions, and monitoring of the ESA boundaries by a qualified archaeologist and local tribal representatives will be implemented during construction.
- **AMM-UTIL-1: Utility Notifications.** During the PS&E phase, Caltrans would coordinate with all affected utility companies regarding the construction schedule for the Project so that relocations can be conducted by each utility company as necessary prior to the start of construction.



## Appendix D List of Technical Studies and References

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