

Morro Road Soldier Pile Wall Project

On State Route 41 In San Luis Obispo County near Morro Bay

District 5—SLO—41—PM 3.1

EA 05-1K720 and Project ID 0519000001

Initial Study with Proposed Mitigated Negative Declaration

Volume 1 of 2



Prepared by the
State of California Department of Transportation

November 2020



General Information About This Document

What's in this document:

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

What you should do:

- Please read the document. Additional copies of the document and the related technical studies are available for review at the Caltrans district office at 50 Higuera Street, San Luis Obispo, California, 93401, Monday through Friday from 8:00 a.m. to 5:00 p.m. If you would like to receive a printed version of this document, please contact Lara Bertaina at 805-542-4610 or by email at lara.bertaina@dot.ca.gov.
- Tell us what you think. If you have any comments regarding the proposed project, please send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Lara Bertaina, Central Region Environmental, California Department of Transportation, 50 Higuera Street, San Luis Obispo, California, 93401. Submit comments via email to: lara.bertaina@dot.ca.gov.
- Submit comments by the deadline: January 13, 2021

What happens next:

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

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For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Lara Bertaina, Central Region Environmental, 50 Higuera Street, San Luis Obispo, CA 93401; phone number 805-542-4610 (Voice), or use the California Relay Service 1-800-735-2929 (TTY), 1-800-735-2929 (Voice), or 711.

Repair a slip out by constructing a soldier pile wall on State Route 41
at post mile 3.1 in San Luis Obispo County

INITIAL STUDY
with Proposed Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agency: California Transportation Commission



John Luchetta
Central Coast Environmental Office Chief
California Department of Transportation
CEQA Lead Agency

November 24, 2020

Date

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DRAFT Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

District-County-Route-Post Mile: 05-SLO-41-Postmile 3.1

EA/Project Identification: 05-1K720, 0519000001

Project Description

The California Department of Transportation (Caltrans) proposes to repair a slip out of an embankment slope below the roadway on State Route 41 near Morro Bay, 3.1 miles east of the Route 1 and Route 41 separation.

Determination

An Initial Study has been prepared by the California Department of Transportation (Caltrans), District 5. On the basis of this study it is determined that the proposed action would not have a significant effect on the environment for the following reasons:

The project would have no effect on agriculture and forest resources, cultural resources, energy, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire.

The project would have no significant effect on air quality, hydrology and water quality, noise, greenhouse gas emissions, and aesthetics.

With the incorporation of the mitigation measures listed below, the project would not have a significant effect on biological resources:

- BIO-3: compensatory onsite mitigation via restoration is proposed at a ratio of 1:1 for temporary impacts and 3:1 for permanent impacts to jurisdictional riparian areas including coast live oak riparian woodlands. A one-year plant establishment period will be required.
- BIO-6: compensatory onsite mitigation for temporary impacts to valley needlegrass grassland is proposed at a minimum ratio of 1:1 using a hydroseed mixture containing *Stipa pulchra* seed with a one-year plant establishment period.

John Luchetta
Central Coast Environmental Office Chief
California Department of Transportation

Date

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Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (known as Caltrans) proposes the Morro Road Soldier Pile Wall project on State Route 41 in western San Luis Obispo County. The project would construct a soldier pile wall at postmile 3.1 to stabilize an over-steepened embankment slope resulting from a slip-out. The project is located about 3 miles northeast of the State Route 41 and State Route 1 interchange in the City of Morro Bay. In this region State Route 41, also referred to as Morro Road or Atascadero Road, is a 2-lane conventional highway with 12-foot lanes and 4-foot shoulders. The roadway connects Morro Bay and Atascadero, serving commuter traffic between the two cities and recreational traffic bound for coastal destinations or the Cerro Alto Campground. See **Figure 1-1** and **Figure 1-2** for location and vicinity maps.

For the proposed project, Caltrans is the lead agency under the California Environmental Quality Act (known as CEQA).

1.2 Purpose and Need

1.2.1 Purpose

The purpose of this project is to address the failing embankment slope below the State Route 41 roadway at postmile 3.1 and protect the roadway from continued slope failure.

1.2.2 Need

The project is needed because heavy rainstorms in March 2018 resulted in a slip-out event on the embankment slope beneath the northbound shoulder that descends into Morro Creek. The over-steepened embankment slope continues to fail and has started to undermine the paved northbound shoulder.

Figure 1-1 Project Vicinity Map

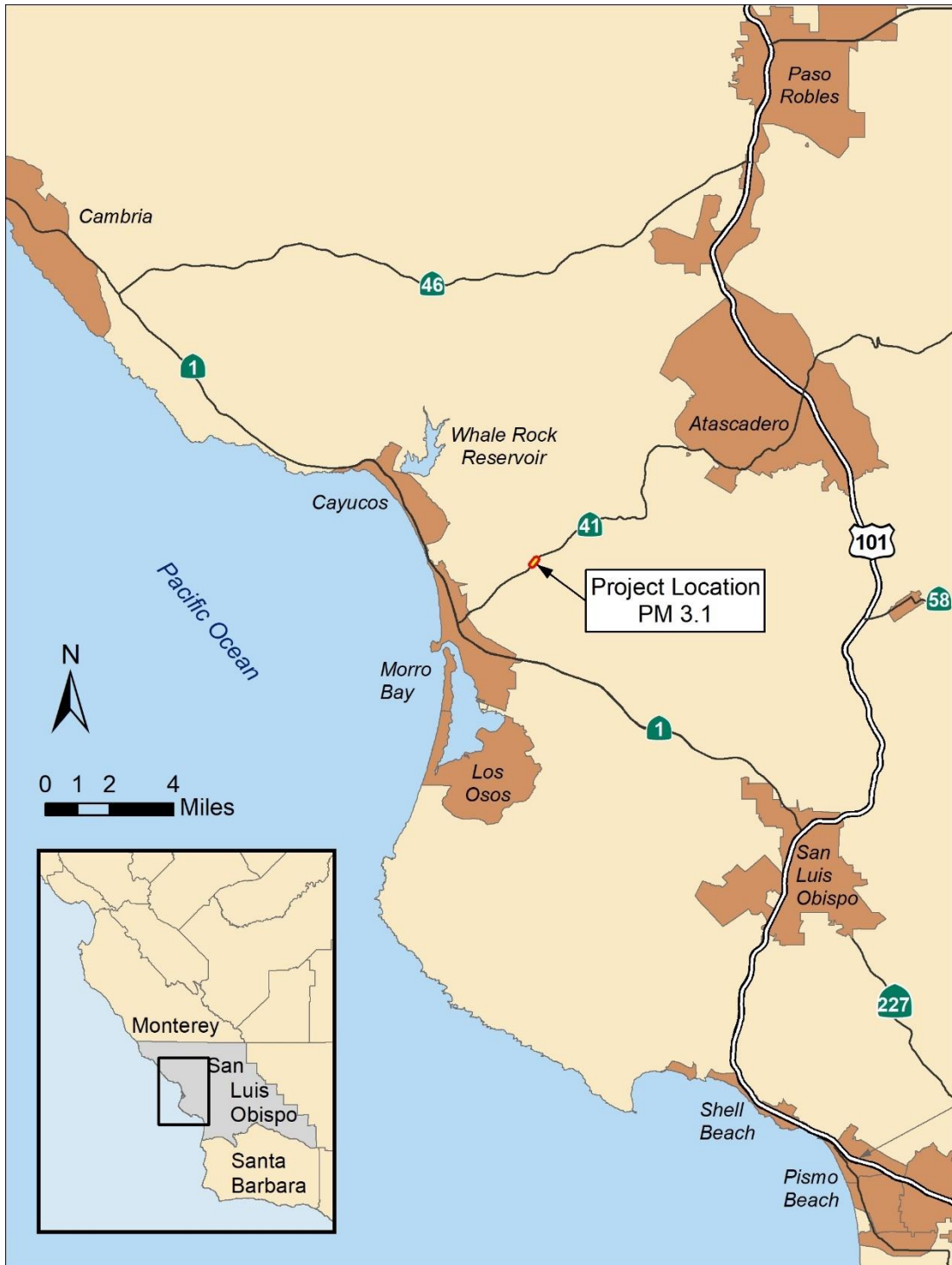
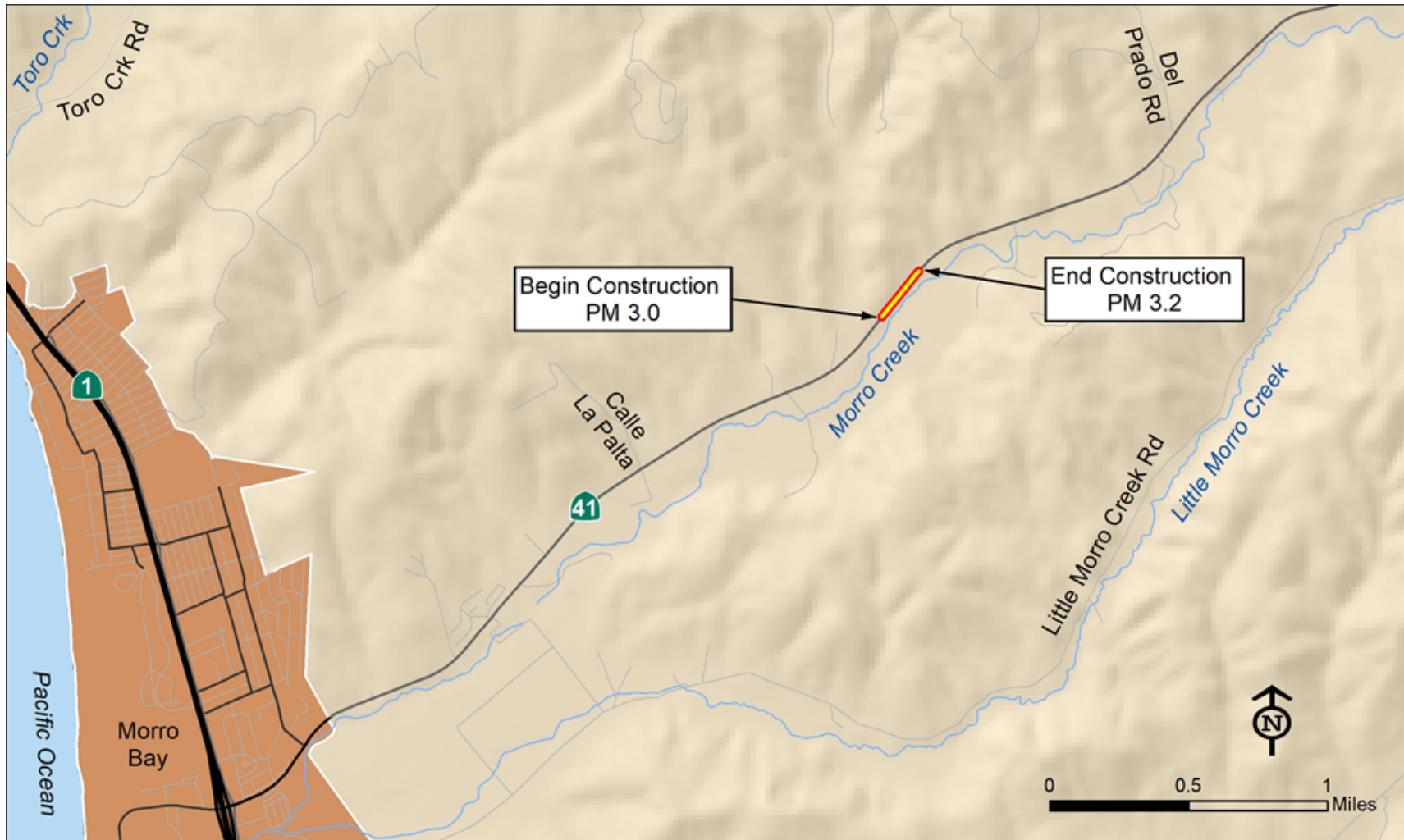


Figure 1-2 Project Location Map



1.3 Project Description

The proposed project would construct a soldier-pile wall along northbound State Route 41 at Post Mile 3.1 to repair the failing embankment slope and protect the highway. The steep slope descends about 50 feet into Morro Creek, and temporary concrete barriers have been placed along the northbound shoulder to prevent errant vehicles from leaving the roadway.

The project is programmed under the 2018 State Highway Operation and Protection Program, with funding from the Major Damage (Permanent Restoration) Program (program code 201.131). The project would begin construction in early 2023 and is expected to take about one year to complete. A build alternative and a no-build alternative are being evaluated. The current estimated construction cost for the build alternative is \$3,100,000.

Elements of the proposed project are outlined below, and preliminary project plans are included in Appendix B.

Construct Soldier Pile Wall at Post Mile 3.1. A 140-foot-long soldier pile wall with two rows of ground anchors would be constructed near the top of the embankment slope and would be a maximum of 26 feet tall. The proposed work would consist of roadway excavation to remove the northbound shoulder and construct the soldier pile wall. Construction of the wall would include vertical drilling to place steel soldier piles and horizontal drilling into the embankment to install the ground anchors. The wall would be constructed using a top-down method, with access below the wall required for installation of the ground anchors. Downslope access would most likely be from the south end of the project site.

The top of the wall would include a concrete bridge barrier that conforms to the standards in the Manual for Assessing Safety with an open-style rail for bicycle safety. After the wall is completed, the shoulder would be reconstructed. The shoulder would be widened from 4 feet to 8 feet to meet current Caltrans standards, and would taper at each end to align with the existing shoulders north and south of the project.

Pavement Rehabilitation and Restriping. Through the project limits (Post Miles 3.0 to 3.2), the existing damaged asphalt concrete pavement would be restored by grinding and overlaying with new pavement. New traffic striping would be added to the repaved highway.

Utility Relocation. The Pacific Gas & Electric powerlines that currently run overhead on the northbound side of State Route 41 need to be relocated to accommodate the tall drill rigs required to complete drilling for geotechnical investigations and eventually for construction of the soldier pile walls. Precise utility relocation plans are still being developed. It is anticipated that the

utilities would be relocated overhead to the top of the slope on the southbound side of State Route 41, within Caltrans right-of-way, due to geotechnical concerns with undergrounding utility lines at this location.

Construction Equipment and Storage. Equipment to be used during project construction may include a crane, loader, drill rig, excavator, backhoe, dump trucks, concrete trucks, grinder, paver, roller, water trucks, traffic control trucks, low boy, and any other equipment necessary in the course of construction. Construction equipment storage would be limited to disturbed areas within the current Caltrans right-of-way, most likely within the closed northbound lane behind a temporary concrete barrier.

Transportation Management Plan. During construction, the northbound travel lane of State Route 41 would be closed and a temporary traffic signal would be installed to direct reversing one-way traffic in the southbound lane. Vehicles and bicycles would share one, 16-foot lane through the construction zone. Temporary traffic striping and temporary signage would be installed to direct motorists, and a concrete barrier would be placed between the reversing lane and the construction area.

Best Management Practices. This project contains a number of standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are listed below in Section 1.6.

1.4 Project Alternatives

A Build Alternative and a No-Build (No-Action) Alternative are under consideration for this project.

Under the Build Alternative, the proposed project would be constructed as outlined in Section 1.3, above.

Under the No-Build alternative, the failing embankment slope would not be repaired, and the slope would continue to deteriorate and undermine the highway. The No-Build Alternative does not meet the purpose and need of the project.

1.5 Alternatives Considered but Eliminated from Further Discussion

The Caltrans Project Development Team considered and rejected three additional alternatives to address the failing embankment slope.

Repair Embankment:

Caltrans considered repairing the embankment, which would involve placing rock slope protection at the base of the slope to prevent future scour, removing slide debris, and constructing a mechanically enhanced (geogrid) engineered slope. This alternative was rejected primarily because it would have resulted in extensive impacts to Morro Creek due to the need to pioneer an access road into the creek and to excavate within and adjacent to the creek in order to properly key in the rock slope protection. This alternative would also still have required closure of the northbound travel lane.

Sidehill Viaduct:

Caltrans considered constructing a sidewall viaduct that would have been about the same length as the soldier pile wall. The viaduct structure would support the northbound lane and a cutoff wall would be constructed along the centerline of the highway. This alternative would not require restoration of the embankment slope, therefore lateral scour along the creek bank would continue, and the over-steepened slope would continue to erode. Construction of the viaduct and cut-off wall would require closure of the northbound lane, similar to the soldier-pile wall, but the temporary one-way reversing lane would be much narrower at about 10 feet. This alternative was rejected because of the additional traffic impacts and because it allowed the embankment slope to continue to fail.

Realignment of the Roadway:

Caltrans considered realigning the roadway about 50 feet to the northwest. Realignment would have involved extensive earthwork into the hillside on the southbound side of the highway and construction of a 900-foot-long retaining wall. New right-of-way would be needed for the realignment, and there would be permanent impacts to an underground communication line. This alternative was rejected because it would greatly extend the project limits and the environmental impacts would be much more extensive. There would be more tree and vegetation removals, an increase in the disturbed soil area, and the retaining wall would be a notable change to the visual environment.

1.6 Standard Measures and Best Management Practices Included in All Alternatives

Caltrans has developed standard measures and best management practices that are implemented on all or most Caltrans projects. The following list is relevant to the proposed project:

- 7-1.02A General: Contractor will comply with laws, regulations, orders, and decrees applicable to the project

- 7-1.02C Emissions Reduction: contractor will submit a certification acknowledging compliance with emissions reduction regulations managed by the California Air Resources Board.
- 7-1.02M(2) Fire Protection: includes development of a fire prevention plan, which would minimize the risk of starting a wildfire during construction.
- 13-2 Water Pollution Control Program: this section provides specifications for the development and implementation of a Water Pollution Control Program.
- 13-4 Job Site Management: this section includes specifications for performing job site management work such as spill prevention and control, material management, waste management, non-stormwater management, and dewatering activities.
- 13-5 Temporary Soil Stabilization: this section includes specifications for placing temporary soil stabilization materials on stockpiles or disturbed soil areas.
- 13-6 Temporary Sediment Control: this section covers specifications for installing temporary sediment controls such as check dams and drainage inlet protections.
- 13-9 Temporary Concrete Washouts: this section covers specifications for installing temporary concrete washouts to receive and dispose of concrete waste.
- 13-10 Temporary Linear Sediment Barriers: this section covers specifications for installing temporary linear barriers to control sediment, like high-visibility fencing, fiber rolls, and temporary large sediment barriers.
- 14-1.02 Environmentally Sensitive Area: Caltrans would mark areas that are environmentally sensitive. These areas cannot be entered unless authorized. If an environmentally sensitive area is breached, work near the area would stop immediately and the resident engineer would be notified.
- 14-2.03 Archaeological Resources: If archaeological resources are discovered within or near the construction limits, the resources would not be further disturbed and all work near the discovery would stop immediately. The area would be secured and the resident engineer notified.
- 14-6.03 Species Protection: This specification includes instructions for the protection of regulated species and their associated habitat, including migratory and nongame birds. If a protected species is discovered work would stop near the discovery and the engineer would be notified so that

Caltrans biologists could investigate the discovery and take appropriate action.

- 14-7.03 Discovery of Unanticipated Paleontological Resources: if unanticipated paleontological resources are discovered, the resources would not be further disturbed and all work near the discovery would stop immediately. The area would be secured and the resident engineer notified.
- 14-8.02 Noise Control: Noise from work activities would be controlled and monitored. Noise would not exceed 86 decibels at 50 feet from the job site from 9:00pm to 6:00am.
- 14-9.02 Air Pollution Control: the project would comply with applicable air-pollution-control rules, regulations, ordinances, and statutes.
- 14-10.02: Solid Waste Disposal and Recycling Report: the types and amounts of solid waste taken to or diverted from landfills or reused on the project would be tracked and reported on each calendar year.
- 14-11.03 Hazardous Waste Management: This specification outlines the procedures for the handling, storage, transport, and disposal of hazardous waste, which would comply with 22 California Code of Regulations Division 4.5.
- 14-11.04 Dust Control: Excavation, transportation, and handling of material containing hazardous waste or contamination must result in no visible dust migration. When clearing, grubbing, and performing earthwork operations in areas containing hazardous waste or contamination, a water truck or tank would be provided on the job site.
- 14-11.06: Contractor-Generated Hazardous Waste: this specification provides instructions to the contractor for the management of hazardous wastes that may be generated during construction such as petroleum materials, paints, stains, and wood preservatives. Instructions for the management of contaminated soils that may be created due to accidental leaks or spills are also included.
- 14-11.08 For Regulated Material Containing Aerially Deposited Lead
- 14-11.09 For Minimal Disturbance of Regulated Material Containing Aerially Deposited Lead
- 14-11.12 Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue: Includes specifications for removing, handling, and disposing of yellow thermoplastic and yellow painted traffic stripe and pavement marking. The residue from the removal of this material is a generated hazardous waste (lead chromate). Removal of existing yellow

thermoplastic and yellow painted traffic stripe and pavement marking exposes workers to health hazards that must be addressed in a lead compliance plan.

- 14-11.13C Safety and Health Protection Measures: Applies to worker protective measures for potential lead exposure.
- 14-11.14 Treated Wood Waste: Required to assess handling and disposal of any potential wood waste generated during the project.
- 84-9.03C Remove Traffic Stripes and Pavement Markings Containing Lead. This specification includes instructions for the removal of yellow traffic stripe, if the stripe would be removed using a cold plane or grinding operation.
- Standard Special Provision 7-1.02K(6)(j)(iii): Earth Material Containing Lead
- Standard Special Provision 36-4: For work involving residue from grinding and cold-planing that contains lead from paint and thermoplastic

1.7 Discussion of the NEPA Categorical Exclusion

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

1.8 Permits and Approvals Needed

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

Agency	Permit/Approval	Status
San Luis Obispo County	Coastal Development Permit	Application will be submitted upon completion of environmental review process.
California Department of Fish and Wildlife	1602 Streambed Alteration Agreement	Application will be submitted upon completion of environmental review process.
U.S. Fish and Wildlife Service	Section 7 consultation and Programmatic Biological Opinion for California red-legged frog	Section 7 consultation is in progress, and the biological opinion will be issued before the environmental document is finalized

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Potentially Significant Impact, Less Than Significant With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

“No Impact” determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report (bound separately in Volume 2), and no further discussion is included in this document.

2.1.1 Aesthetics

Considering the information included in the Visual Impact Assessment dated July 2020 the following significance determinations have been made:

Except as provided in Public Resources Code Section 21099:

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

Question—Would the project:	CEQA Significance Determinations for Aesthetics
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No Impact

Affected Environment

The visual quality of the rural, well-vegetated State Route 41 corridor near the project is considered to be high based on the visual resources present, and the importance of the scenic environment and highway corridor as identified in the state and local coastal planning policy. State Route 41 is designated as “eligible” in the State Scenic Highway system and this portion of the highway is located in the coastal zone.

The regional landscape consists of rolling hills with riparian areas creating densely vegetated canyons. The highway traveler has a range of views starting from close-in views of the riparian areas to mid-range views of the rolling hills and distant views of steeper mountains to the east.

The overall visual context is a combination of mountain, hills, and vegetation. Route 41 passes through a variety of plant communities and vegetative types. In general, creeks and drainages hold stands of sycamore, cottonwood, and willows. Oak and other native trees and plants are found mostly at the upper edges of riparian areas along with coastal chaparral and grasslands. Morro Creek with mature riparian vegetation parallels the highway on the northbound side.

Throughout the project limits, built developments have a low visual presence in the landscape. The main developments along State Route 41 are the roadway itself and related features, occasional roadside home sites, ranches, and agricultural uses. Though there are visual structures and highway elements, they do not dominate the views when seen in the context of the overall landscape.

Environmental Consequences

The proposed project would result in a minor reduction of the rural character and visual quality of the project area but would have a minimal effect on scenic vistas of hills and riparian areas. Project elements that would contribute to the reduction in visual quality include the addition of a new bridge barrier and bridge rail and a widened shoulder. Avoidance and minimization measures such as using open-style bridge rail and staining of the concrete barrier and other concrete or metal roadside elements would make these elements less noticeable. The soldier pile wall would not be noticed by the highway traveler because it would be below the roadway.

Vegetation removal could also temporarily reduce visual quality. However, replanting of disturbed areas would ensure that the vegetation would eventually grow back.

Overall, construction of the project would increase the engineered appearance of the highway, but not in an unexpected way given the presence of several other soldier pile walls with concrete barriers throughout the western State Route 41 corridor. It is anticipated that after project construction is finished and revegetation has occurred the project would generally go unnoticed.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures would reduce potential impacts to the visual environment.

VIS-1: Revegetate disturbed areas to the greatest extent possible, considering safety and horticultural appropriateness.

VIS-2: All tree pruning shall be conducted under the direct supervision of an International Society of Arboriculture Certified Arborist and shall minimize tree disfiguration and promote the healthy regrowth of the tree.

VIS-3: Following construction, re-grade and re-contour any new construction access roads, staging areas and other temporary uses as necessary to match the surrounding natural topography along State Route 41.

VIS-4: An open style bridge barrier shall be used.

VIS-5: The barrier, including all metal bicycle and/or pedestrian rail associated with the barrier shall be stained or darkened to minimize contrast and noticeability. The color shall be determined and approved by Structure Design in conjunction with District 5 Landscape Architecture.

VIS-6: All metal and concrete roadside elements including but not limited to guardrail, transitions, end treatments, and cable safety railing shall be stained

or darkened to be visually compatible with the rural setting. The color shall be determined and approved by District 5 Landscape Architecture.

VIS-7: Replacement planting shall include aesthetic considerations as well as the inherent biological goals. Revegetation shall include native trees and plants as determined by the Caltrans Biologist and Caltrans Landscape Architect. Revegetation shall occur at the maximum extent horticulturally viable. Planting shall be maintained until established.

2.1.2 Agriculture and Forest Resources

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

The project would not convert prime farmland, unique farmland or farmland of statewide importance to non-agricultural use or conflict with existing zoning for agricultural use or Williamson Act contract. A temporary construction easement for site access may be needed from the parcel on the northbound side of State Route 41. This parcel is zoned as agricultural land within the Chorro Valley Agricultural Preserve Area and currently operates as an agricultural farm. However, the portion of the parcel that would be needed for site access is on the highway side of Morro Creek, where no agricultural activities are presently occurring. The project would not affect farm operations.

Considering this information, the following significance determinations have been made:

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

2.1.3 Air Quality

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

The project would not increase the capacity of the highway therefore there would be no change in long-term air quality associated with the project. Temporary increase in air emissions and fugitive dust are expected during the construction period but would be minimized through standard construction dust and emission minimization practices and procedures.

Considering this information, and the information included in the Air Quality, Noise, and Water Quality Technical Memo dated November 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Air Quality
a) Conflict with or obstruct implementation of the applicable air quality plan?	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?	No 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?	No Impact

2.1.4 Biological Resources

Considering the information included in the Natural Environmental Study dated November 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant with Mitigation
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less Than Significant with Mitigation
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

Question—Would the project:	CEQA Significance Determinations for Biological Resources
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	No Impact
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

Affected Environment

The project is located on State Route 41 in the rolling hills of western San Luis Obispo County, roughly parallel to Morro Creek. The northbound lane is constructed near an embankment that descends about 50 feet down to Morro Creek, and the southbound lane is constructed against a cut section about 50 feet high. The biological study area for the project includes all areas that may be directly, indirectly, temporarily, or permanently impacted by construction, as well as some adjoining habitats to provide a larger ecosystem context. The project is within the coastal zone (see Appendix C for the coastal policy analysis completed for this project).

The biological resources that have the potential to be affected by the proposed project are discussed in more detail below.

Jurisdictional Riparian Areas

Wetlands, other waters, and riparian areas that occur along the banks of streams or rivers are resources protected under several laws and regulations, which are regulated by federal, state, and local agencies.

Within the project area, riparian areas under the jurisdiction of the California Department of Fish and Wildlife and the California Coastal Commission are present on the eastern (northbound) side of State Route 41. While there are differences in how these two agencies define their jurisdictional features, for this project they cover the same area, which includes the region that extends from the lowest bed elevation of Morro Creek, up to the top of the creek bank or the outer edge of riparian vegetation (whichever is greater). The riparian areas near the project are dominated by coast live oak riparian woodlands, which are described in more detail in the natural communities section below.

Further downslope towards Morro Creek are federal and state regulated other waters, but these resources would not be affected by the project. No wetlands were mapped within the biological study area (see the Natural Environment Study for more information).

Natural Communities and Habitats of Concern

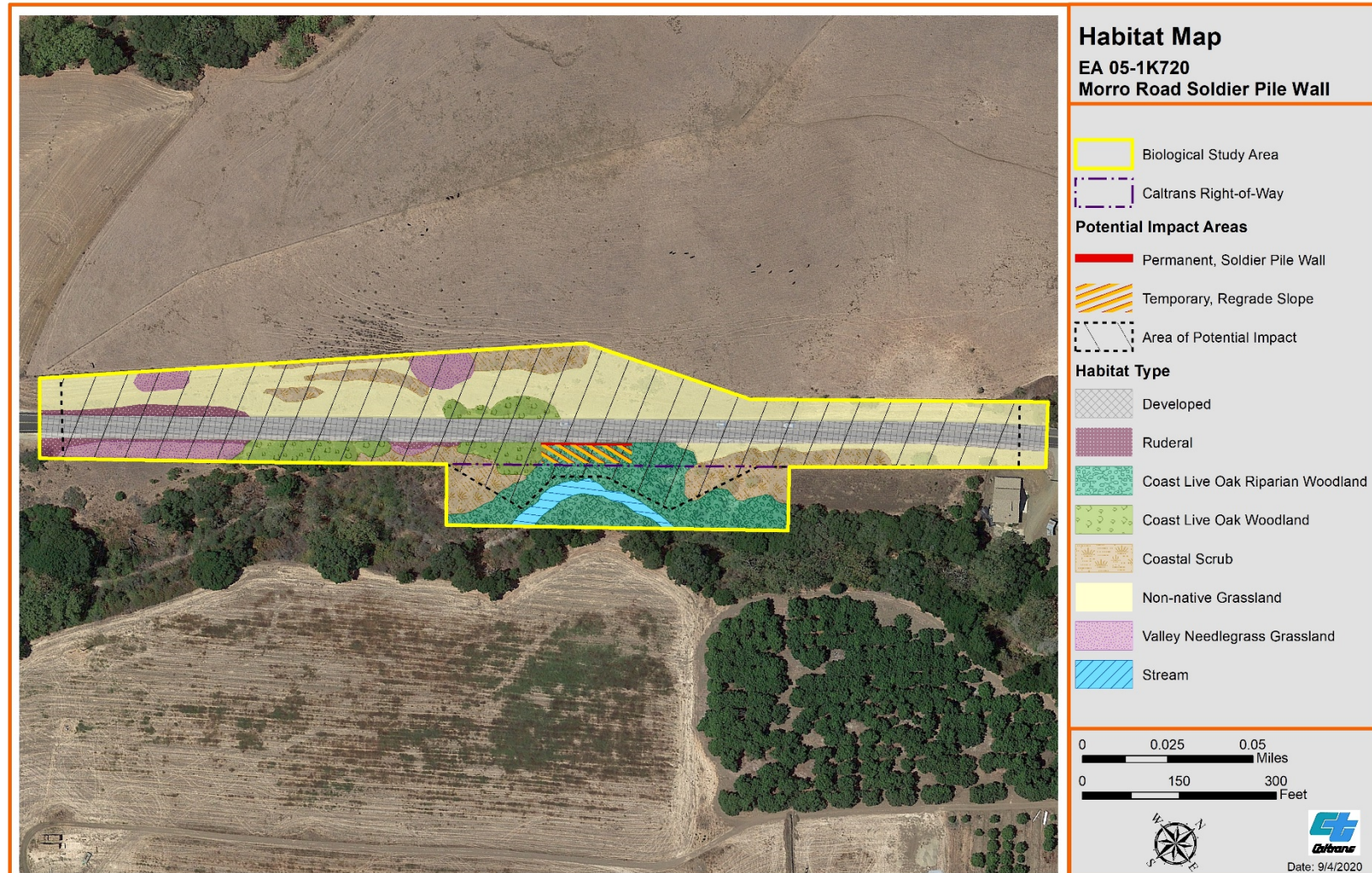
The types of habitats found near the project include coast live oak woodlands, coastal scrub, non-native grasslands, and valley needlegrass grasslands (a habitat of concern). The area also contains ruderal (disturbed) areas bordering the highway, and the highway itself is considered a developed area. Figure 2-1 depicts the habitats present within the biological study area.

Coast Live Oak Woodlands and Riparian Woodlands: Coast live oak woodlands can be found on the eastern (northbound) side of State Route 41, with the woodlands located along Morro Creek considered to be coast live oak riparian woodlands. The two types of oak woodlands are dominated by coast live oak trees with an understory of poison oak, hummingbird sage, and wood mint. Western sycamores and arroyo willows are more common within the riparian woodlands along the creek. Both types of oak woodlands support high-quality habitat for various nesting birds and other species that frequent riparian corridors such as raccoons, striped skunks, and Virginia opossums. During biological surveys woodrat nests were observed within the woodlands and many bird species were documented including California scrub jays, acorn woodpeckers, northern flickers, black-headed grosbeaks, chestnut-backed chickadees, and oak titmouses.

Coastal Scrub: The coastal scrub communities on the western side of State Route 41 are dominated by both coyote brush and sage brush, while the coastal scrub on the eastern side of the highway closer to Morro Creek contains poison oak and coyote brush with smaller amounts of sage brush. Coastal scrub provides habitat for various nesting birds and other species such as cottontail rabbits, California quails, spotted towhees, and California towhees.

Non-Native Grassland: West of the highway, the project area contains mainly non-native grassland dominated by wild oats, false brome, and soft chess brome. Herbaceous species within the grasslands include, vetch, succulent lupine, ribwort plantain, and cat's ear. Animals that utilize grassland habitat within the biological study area include pocket gopher, coyote, Cassin's kingbird, Brewer's Blackbird, white-tailed kite, and western bluebird.

Figure 2-1: Habitat Types and Areas of Potential Impact within the Biological Study Area



Valley Needlegrass Grassland: This native grassland is designated as a habitat of concern because it is a California Department of Fish and Wildlife Sensitive Natural Community. It can be found in patches within the non-native grassland and ruderal habitats on the hilltops above the southbound lane of State Route 41, and along the shoulders of the northbound lane. Native valley needlegrass grassland is distinguished from non-native grassland because it contains purple needlegrasses that make up 10 percent or more of the ground cover.

Valley needlegrass grasslands within the project area were determined to not meet the criteria for Unmapped Environmentally Sensitive Habitat Areas defined in the County of San Luis Obispo Local Coastal Program because 1) the small patches are fragmented and discontinuous, 2) the area does not provide unique characteristics or natural functions that differ from the surrounding non-native grasslands, and 3) the patches do not harbor threatened or endangered species.

Special-Status Plant and Animal Species

The term special-status species refers to plants or animals that are federally or state listed as endangered, threatened, or rare, species that are candidates or proposed for federal or state listing, and species considered special concern species by federal or state agencies. There is potential for 63 special-status plant species and 44 special-status animal species to occur within the biological study area and surrounding area. One special status plant species (Cambria morning glory) was observed within the biological study area during appropriately timed biological field surveys, and potential habitat was documented for 20 additional species. No special-status animal species were observed during field surveys, but habitat for 15 species, including migratory nesting birds, was recognized.

The special-status plant and animal species that have the potential to be affected by the project are described in greater detail below.

Cambria Morning Glory: Cambria morning glory is an herbaceous plant that grows with vines and has white, trumpet-shaped flowers. About ten individual plants were observed within the biological study area. Cambria morning glory is considered a rare plant by the California Native Plant Society. It has been assigned a California Rare Plant Rank of 4, meaning that it is on the “watch list” due to its limited distribution in California, and a threat rank of 0.2, meaning that it is moderately threatened in California.

South-Central California Coast Steelhead and Critical Habitat: Steelhead trout are the anadromous (ocean-going) form of rainbow trout. Adults migrate from the ocean into upstream freshwater habitat to spawn, and the resulting juvenile fish hatch and rear in freshwater habitats before migrating downstream to the ocean to mature. The south-central California coast steelhead distinct population is listed as threatened under the Federal

Endangered Species Act and is considered a California Species of Special Concern by the California Department of Fish and Wildlife.

Although no steelhead trout were observed during surveys, Morro Creek is known to support steelhead trout and steelhead trout critical habitat. Federally designated critical habitat for south-central California coast steelhead trout occurs in Morro Creek below the project. This portion of the creek provides two primary constituent elements for steelhead trout critical habitat: freshwater rearing sites and freshwater migration corridors free of obstruction.

California Red-legged Frog and Critical Habitat: The California red-legged frog is federally threatened and considered a Species of Special Concern by the California Department of Fish and Wildlife. California red-legged frogs use a variety of habitats, including aquatic, riparian, and upland habitats. The California red-legged frog uses both riparian and upland habitats for foraging, shelter, cover, and travel.

No protocol surveys were conducted for California red-legged frogs and the species was not observed during general wildlife surveys; however, the biological study area provides suitable breeding and upland habitat for the frogs. Additionally, there are at least eight artificial or agricultural ponds within two miles of the biological study area. There are known occurrence records for California red-legged frogs within Morro Creek and therefore, presence of the species in the biological study area is inferred. The biological study area is within federally designated critical habitat for California red-legged frogs.

Coast Range Newt: The coast range newt is considered a Species of Special Concern by the California Department of Fish and Wildlife. It is a stocky medium-sized amphibian that occurs from sea level to approximately 4,200 feet in coastal mountains from Mendocino to San Diego County. Coast range newts are terrestrial but migrate to water to breed. Upland habitats include forests, oak woodlands, chaparral and grasslands. No coast range newts were observed during biological surveys; however, suitable breeding habitat is found within Morro Creek and suitable upland dispersal habitat is found throughout the biological study area.

Northern California Legless Lizard: The Northern California legless lizard is a California Species of Special Concern. The species occurs in oak woodland, chaparral, riparian woodland, oak-pine forests, and desert scrub. It frequents areas that contain at least some loose fine soil or litter through which it burrows, including sand, loam, alluvium, leaf litter, or sand mixed with humus. The species needs adequate soil moisture, warmth, and surface cover. The northern California legless lizard was not observed during surveys; however, loamy soils with leaf litter and moisture under coast live oak canopy provides suitable habitat for this species.

Migratory Birds: Northern Harriers, White-tailed Kites, Loggerhead Shrikes, Cooper's Hawk and other nesting birds. The northern harrier is a California Species of Special Concern. These birds are slim-bodied raptors with long tails, wings, and legs. They have a distinctive flight pattern that is slow and low to the ground. They occur mainly in open fields, meadows, grasslands, prairies and marshes but usually breed only in wetter habitats. Nests are placed on the ground in tall reeds or grasses.

The white-tailed kite is a Fully Protected Species by the California Department of Fish and Wildlife. It is a whitish falcon-shaped kite that is gull-like in color and flight. They hunt rodents by hovering as they look for prey and then plunging down to catch their prey. The kites prefer grassland, savanna, marsh, and riparian habitats. No white-tailed kite nests were observed within the biological study area or the surrounding area.

The loggerhead shrike is a California Species of Special Concern. These carnivorous birds hunt like raptors by watching for prey such as mice, bats, birds, and insects, from an elevated perch. They strike in a smooth movement, swooping down, attacking quickly, and carrying prey to another perch. Shrikes then impale prey on sharp objects, such as barbed wire. The loggerhead shrike inhabits open country with scattered trees and shrubs, desert scrub, grasslands, farms, parks, suburban neighborhoods.

The Cooper's hawk is included on the California Department of Fish and Wildlife Watch List. These slender, crow-sized hawks range throughout the United States and are widely distributed throughout California. They occupy forests and woodlands, especially near edges, and prefer dense tree stands. Nests are built in deciduous trees usually 20 to 50 feet above the ground. Breeding occurs from March to August, peaking from May to July. Incubation of their eggs lasts 35 to 65 days, and the young hatch about five to eight weeks later.

Each of the migratory bird species discussed above have the potential to nest in habitats within the biological study area. These birds, as well as any other migratory birds that may be present within the biological study area, are protected by the Migratory Bird Treaty Act and California Fish and Game Code Section 3503.

Pallid Bat and Other Roosting Bats: The pallid bat is considered a Species of Special Concern by the California Department of Fish and Wildlife. They are a nocturnal species found throughout California, especially in lowland areas where they can be found roosting in colonies within rock crevices or other protective structures like buildings, bridges, trees, or snags. Their primary food source is ground dwelling insect species including crickets, grasshoppers, beetles, and centipedes.

Roosting bat species are addressed here as a group because they have similar habitat requirements, project-related impacts, and avoidance and minimization measures. Although no roosting bats or evidence of bats were observed during surveys, trees could provide roosting habitat for common bat species.

Invasive Species

Biological surveys identified 33 plant species that are listed as invasive by the online California Invasive Plant Council Database. Three plant species in the biological study area were rated as highly invasive, 21 species were moderately invasive, and nine are rated as “limited.” Invasive species were most prevalent in non-native grasslands and ruderal/disturbed areas along the sides of the highway.

Environmental Consequences

Jurisdictional Riparian Areas

Construction of the soldier pile wall would permanently impact about 0.007 acre and temporarily impact about 0.408 acre of jurisdictional riparian areas, as outlined in Table 2-1 and depicted in Figure 2-1. Permanent impacts would occur where the new wall would be physically located, and temporary impacts would occur most notably below the wall for temporary access, slope regrading, and erosion control repair activities post-construction.

The impacts to riparian vegetation would be avoided to the greatest extent possible and would include vegetation removal necessary for access below the wall. Temporary impacts will be restored at a 1:1 ratio (acreage). Compensatory mitigation is proposed at a 3:1 ratio (acreage) for permanent impacts to riparian vegetation via restoration, as outlined in Mitigation Measure BIO-3. Oak trees would be replanted at a 3:1 ratio. A one-year plant establishment period would be required, which would include semi-annual (twice a year) inspections, weeding, and replacement. Plants would be manually watered for one year using a temporary irrigation system supplied by a water tanker truck.

It is anticipated that a coastal development permit and a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife would be required for the project. Therefore, the project would also follow all conditions outlined in these permits for the protection of riparian areas and other biological resources.

With implementation of avoidance and minimization measures and mitigation measure BIO-3, Caltrans has made a determination of no adverse impact for jurisdictional riparian areas.

Natural Communities

Estimated permanent and temporary impacts to the natural communities within the project area are presented in Table 2-1 and depicted in Figure 2-1 and were calculated as described above for riparian areas.

Table 2-1: Summary of Potential Impacts to Jurisdictional Riparian Areas and Natural Communities and Habitats of Concern

Natural Community/Habitat	Permanent Impacts (square feet / acres)	Temporary Impacts (square feet / acres)
Riparian areas: <ul style="list-style-type: none"> Coast live oak riparian woodland California Department of Fish and Wildlife jurisdictional areas California Coastal Commission jurisdictional areas 	292 square feet / 0.007 acre	17,762 square feet / 0.408 acre
Coast live oak woodland (non-riparian)	none	16,299 square feet / 0.374 acre
Coastal scrub	none	29,083 square feet / 0.668 acre
Non-native grassland	40 square feet / 0.001 acre	86,399 square feet / 1.983 acres
Valley needlegrass grassland	none	15,115 square feet / 0.347 acre
California red-legged frog critical habitat	292 square feet / 0.007 acre	170,842 square feet / 3.921 acres

Coast Live Oak Woodlands and Riparian Woodlands: Construction of the soldier pile wall would result in permanent and temporary impacts to coast live oak riparian woodlands as described for jurisdictional riparian areas above. Construction of the wall would require removal of two coast live oaks trees and trimming of the branches from an additional oak. All other trees would be protected using environmentally sensitive area fencing.

The avoidance, minimization, and mitigation measures implemented for jurisdictional riparian areas would also protect coast live oak woodlands and riparian woodlands. No adverse effect is anticipated for woodland habitat.

Coastal Scrub and Non-Native Grasslands: Temporary impacts to coastal scrub and non-native grasslands would result from equipment storage and site access during utility relocation.

Precise plans for utility relocation are still being determined, but it is assumed that the utilities would be relocated overhead, with two new poles placed in non-native grasslands on the hillside above the southbound lane. The permanent impact area to non-native grasslands would be about 20 square feet per pole, and temporary impacts to grasslands and coastal scrub would

result from driving overland for installation of the new poles and pulling the power lines.

With implementation of the avoidance, minimization, and mitigation measures for natural communities, there would be no adverse effect to coastal scrub or non-native grasslands.

Valley Needlegrass Grassland: Temporary impacts to valley needlegrass grassland may occur during utility relocation. The relocation would be designed so that the new poles would not be placed in areas containing valley needlegrass grassland. However, the heavy equipment needed to relocate the poles may need to drive through grassland areas to access the new pole sites, causing temporary impacts. All areas of grassland temporarily impacted by construction would be reseeded, following Mitigation Measure BIO-6.

With implementation of the avoidance, minimization, and mitigation measures for natural communities, there would be no adverse effect to this habitat of concern.

Special-Status Plant and Animal Species

Cambria Morning Glory: The ten individual Cambria morning glory plants in the biological study area are not anticipated to be affected by the project. The project would be designed to avoid them, and environmentally sensitive area fencing would be installed around them to ensure they are protected during construction.

With implementation of avoidance and minimization measure BIO-8, there would be no adverse impact for Cambria morning glory.

South-Central California Coast Steelhead and Critical Habitat: All construction work associated with the project would occur well above the ordinary high-water mark of Morro Creek, therefore avoiding the creek. No permanent or temporary impacts to stream habitat that supports steelhead would occur. Indirect effects during construction from erosion and sedimentation would be prevented by installation of environmentally sensitive area silt fencing above the ordinary high-water mark, and implementation of Caltrans standard specifications, best management practices, and the project specific Water Pollution Control Program that all address proper erosion control, runoff, spill prevention, and related topics. The avoidance and minimization measures described below for riparian habitat would also reduce impacts to south-central California Coast steelhead and steelhead critical habitat.

The Federal Endangered Species Act Section 7 effects determination is that the proposed project will have no effect on south-central California coast steelhead and no effect on south-central California coast steelhead critical habitat.

California Red-legged Frog and Critical Habitat: Although no effects are anticipated to Morro Creek stream habitat (see steelhead discussion, above), project construction within the uplands and associated riparian habitat could result in the injury or mortality of California red-legged frogs, if present. The potential need to capture and relocate California red-legged frogs would subject these animals to stresses that could result in adverse effects. Injury or mortality could occur via accidental crushing by worker foot-traffic or construction equipment. The potential for these impacts is anticipated to be low due to lack of observations of the species during surveys and the site's steep embankment that would be difficult for frogs to traverse and occupy.

Estimated permanent and temporary impacts to federally designated critical habitat for California red-legged frogs are shown in Table 2-1. Constructing the soldier pile wall may cause about 3.921 acres of temporary impacts to the critical habitat. Permanent impacts total less than 0.007 acre for the wall structure itself. While the project could result in a temporary disruption of habitat for California red-legged frogs, the extent and effects of this are estimated to be minor and restricted to one season (162 days) during April through December. No aquatic breeding or non-breeding habitat would be impacted, and sufficient upland habitat is present outside the area of impact nearby.

The Federal Endangered Species Act Section 7 effects determination is that the proposed project may affect, and is likely to adversely affect, California red-legged frog and California red-legged frog critical habitat. The compensatory mitigation described below for riparian habitat would also mitigate for impacts to California red-legged frog and critical habitat, so no additional mitigation is proposed.

Coast Range Newt: Potential impacts to coast range newt would be the same as the impacts described above for California red-legged frogs.

With implementation of the avoidance, minimization, and mitigation measures for jurisdictional riparian areas and California red-legged frog, which would also protect coast range newt, Caltrans has made a determination of no adverse impact to this species.

Northern California Legless Lizard: Potential impacts to northern California legless lizards could occur during ground disturbing activities within coast live oak woodlands and during tree removal, if the species is present.

With implementation of the avoidance and minimization measures for legless lizards, Caltrans has made a determination of no adverse impact for this species.

Nesting Birds: Potential nesting habitat for Cooper's hawks, Northern harriers, white-tailed kites, loggerhead shrikes, and other nesting bird species occurs

in shrubs, trees, and tall grasses throughout the project area. Direct impacts to nesting birds could result if removal of vegetation occurs during the nesting season. These direct effects would result in the injury or mortality of nesting birds or harassment that could alter nesting behaviors. Indirect impacts could also result from noise and disturbance associated with construction during the nesting season, which could alter nesting behaviors. The implementation of pre-construction nesting surveys and buffer exclusion zones (if necessary), would reduce the potential for adverse effects to nesting migratory birds.

With implementation of the avoidance and minimization measures for nesting birds, Caltrans has made a determination of no adverse impact for migratory bird species.

Pallid Bat and Other Roosting Bats: Although no bat roosts were observed during surveys, there is a small chance the bats could use trees within the project area. Direct impacts to bats could result during removal of the trees if bats are found to be roosting. These direct effects would result in the injury or mortality of bats or harassment that could alter roosting behaviors. Indirect impacts could also result from noise and disturbance associated with construction, which could also alter roosting behaviors. The implementation of pre-activity surveys and exclusion zones (if necessary) would reduce the potential for adverse effects to roosting bat species.

With implementation of the avoidance and minimization measures for roosting bats, Caltrans has made a determination of no adverse impact for pallid bat and other roosting bat species.

Invasive Species

The spread of invasive species would be managed with the implementation of the avoidance and minimization measures listed below.

Avoidance, Minimization, and/or Mitigation Measures

The measures listed below would reduce potential impacts to biological resources. Mitigation measures are labeled as such, and the remaining measures are avoidance or minimization measures.

The measures have been organized by the primary resource or species they are designed to protect but may apply to several biological resources.

It should also be noted that the Water Pollution Control Program and many of the best management practices and standard specifications outlined in Section 1.6 would avoid and minimize impacts to biological resources.

Jurisdictional Riparian Areas and Natural Communities

BIO-1: Prior to any ground-disturbing activities, environmentally sensitive area fencing shall be installed around jurisdictional areas, coastal zone environmentally sensitive habitat areas, and the dripline of trees to be

protected within the project limits. Environmentally sensitive area fencing shall consist of orange construction fencing (or equivalent) and be maintained in good condition until construction is complete. Caltrans-defined environmentally sensitive areas and protected trees shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-2: Prior to any ground-disturbing activities silt fencing shall be installed above the ordinary high-water mark along the reaches of Morro Creek within the BSA to prevent any encroachment into the creek. Silt fence shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-3: Mitigate at a 1:1 ratio (acreage) for temporary impacts and at a 3:1 ratio (acreage) for permanent impacts to riparian vegetation via restoration (re-establishment). Oak trees shall be replaced at a 3:1 ratio. A one-year plant establishment period will be required, which shall include semi-annual (twice a year) inspections, weeding, and replacement. Plants shall be manually watered for one year.

Valley Needlegrass Grassland

BIO-4: Utility pole relocation placement shall avoid all mapped Valley Needlegrass Grassland communities with the Biological Study Area.

BIO-5: Prior to any ground-disturbing activities, environmentally sensitive area fencing shall be installed around Valley Needlegrass Grassland habitat that can be avoided. Caltrans-defined environmentally sensitive areas shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-6: Any areas of valley needlegrass grassland that must be temporarily impacted during construction shall be replaced onsite at a minimum ratio of 1:1 using a hydroseed mixture containing *Stipa pulchra* seed with a one-year plant establishment period.

BIO-7: Follow-up weed management of reseeded valley needlegrass grassland shall occur for one successive year within the project's area of potential impact to lessen long-term impacts to native perennial grassland.

Special-Status Plants

BIO-8: Prior to any ground-disturbing activities, environmentally sensitive area fencing shall be installed around Cambria morning glory plants to avoid any impacts to the special status plants. Caltrans-defined environmentally sensitive areas shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-9: Once Temporary Construction Easements are granted, the Caltrans Biologists shall conduct seasonally appropriate surveys for special status

plants, including Cambria morning glory, in areas of private property within the biological study area. An addendum to the Natural Environment Study documenting the survey findings shall be prepared prior to any construction activities. The addendum shall include identification of any areas requiring additional environmentally sensitive area fencing or additional avoidance and minimization measures.

California Red-Legged Frog and Coast Range Newt

BIO-10: Applicable measures from the Programmatic Biological Opinion between Caltrans and the U.S. Fish and Wildlife Service for California red-legged frog shall be implemented. The Programmatic Biological Opinion contains an extensive list of measures for each phase of the construction period. Some of the notable measures are summarized below:

- Biologists that survey for, handle, capture, and monitor red-legged frogs must be approved by the U.S. Fish and Wildlife Service
- Pre-construction surveys must be completed 48-hours before any construction work starts. Survey shall include identification and appropriate treatment of red-legged frogs as well as removal of exotic invasive species such as bullfrogs.
- Biological monitor shall be on-site until all disturbance of habitat area is completed
- Biologist to conduct worker environmental awareness training for construction personnel
- Schedule construction work to minimize impacts to red-legged frogs
- Minimize the project footprint and locate access routes outside of potential habitat areas
- Follow the fieldwork code of practices of the Declining Amphibian Task Force to prevent introduction of diseases
- Follow appropriate Caltrans Standard Specifications and Best Management Practices relevant to working near waterways, refueling, and trash storage
- Restore the site to natural contours and revegetate with native plants suitable for the habitats within the project area
- Avoid use of herbicides and follow appropriate protocols if herbicides must be used
- Complete proper reporting to the U.S. Fish and Wildlife Service, including a Project Completion Report

California Legless Lizard

BIO-11: A qualified biologist shall conduct preconstruction surveys for legless lizards no more than 48 hours before initial ground disturbance within coast live oak woodlands and/or prior to tree removal. This survey shall include

systematic subsurface searching (raking suitable habitat) where feasible because legless lizards are burrowing animals.

BIO-12: If any legless lizards are discovered during preconstruction surveys, they shall be relocated to a nearby area with suitable habitat similar to where they were discovered. Additionally, if discovered during preconstruction surveys, a biological monitor shall be present during oak tree removal to safely relocate any legless lizards that could be uncovered during tree removal.

Nesting Birds

BIO-13: A Caltrans biologist shall provide a brief worker training and/or informational material to be used in identifying raptors, protocols for responding to their presence within the construction site if they arrive, and notification procedures.

BIO-14: If a white-tailed kite is observed nesting within 500-feet of the project area, all work in the area shall immediately stop. Caltrans shall immediately notify the California Department of Fish and Wildlife. A qualified biologist shall be called to monitor the kite weekly until young have fledged the nest. Work within the 500- foot buffer can only commence once the kite's offspring have fledged the nest, as confirmed by the biologist and with approval of the California Department of Fish and Wildlife. If an individual white-tailed kite perches within the project area, construction activities shall stop until the kite has flown away.

BIO-15: Prior to construction, vegetation removal shall be scheduled to occur from September 2 to February 14, outside of the typical nesting bird season if possible, to avoid potential impacts to nesting birds. If tree removal or other construction activities are proposed to occur within 100 ft of potential habitat during the nesting season (February 15 to September 1), a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans no more than three days prior to construction. If an active nest is found, Caltrans shall implement an appropriate buffer or monitoring strategy based on the habits and needs of the species. The buffer area or monitoring strategy shall be implemented until a qualified biologist has determined that juveniles have fledged, or nesting activity has otherwise ceased.

BIO-16: During construction, active bird nests shall not be disturbed and eggs or young of birds covered by the Migratory Bird Treaty Act and California Fish and Game Code shall not be killed, destroyed, injured, or harassed at any time.

BIO-17: Trees to be removed shall be noted on design plans. Prior to any ground-disturbing activities, environmentally sensitive fencing shall be installed around the dripline of trees to be protected within project limits.

BIO-18: All clearing/grubbing and vegetation removal shall be monitored and documented by a qualified biologist regardless of time of year.

Roosting bats:

BIO-19: Tree removal shall be scheduled to occur from September 2 to February 14, outside of the typical bat maternity roosting season if possible, to avoid potential impacts to roosting bats. If tree removal or other construction activities are proposed to occur within 100 ft of potential habitat during the bat maternity roosting season (February 15 to September 1), a bat roost survey shall be conducted by a biologist determined qualified by Caltrans within 14 days prior to construction. The biologist(s) conducting the preconstruction surveys shall also identify the nature of the bat utilization (i.e., no roosting, night roost, day roost, maternity roost) and determine if passive bat exclusion will be necessary and feasible. If an active day roost is found, a qualified Caltrans biologist shall determine an appropriate buffer based on the habits and needs of the species. The buffer area shall be avoided until a qualified biologist has determined that roosting activity has ceased, or exclusionary methods have successfully evicted roosting bats.

BIO-20: If bats are found by a qualified biologist to be maternity roosting, active bat maternity roosts shall not be disturbed or destroyed at any time.

BIO-21: If roosts are discovered, readily visible exclusion zones shall be established in areas where roosts must be avoided using environmentally sensitive area fencing. The size/radius of the exclusion zone(s) shall be determined by a qualified biologist.

Invasive Species:

BIO-22: During construction, Caltrans shall ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.

BIO-23: Only clean fill shall be imported. When practicable, invasive exotic plants in the project site shall be removed and properly disposed. Any plant species rated as “High” on the Cal-IPC Invasive Plant Inventory that are removed from the construction site shall be taken to a landfill to prevent the spread of invasive species. Inclusion of any species that occurs on the Cal-IPC Invasive Plant Inventory in the Caltrans erosion control seed mix or landscaping plans for the project shall be avoided.

BIO-24: Construction equipment shall be inspected to verify it is clean and weed free by Caltrans before entering the construction site. If necessary, wash stations onsite shall be established for construction equipment under the guidance of Caltrans in order to avoid/minimize the spread of invasive plants and/or seed within the construction area. If wash stations onsite are infeasible due to the site’s space constraints, construction equipment shall be cleaned off-site and then driven only on paved roads to the site.

2.1.5 Cultural Resources

Considering the information included in the Cultural Resources Review Memo dated July 2020, which indicates there are no built environment resources nor archaeological resources near the project, the following significance determinations have been made:

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

2.1.6 Energy

Caltrans incorporates energy efficiency, conservation, and climate change measures into transportation planning, project development, design, operations, and maintenance of transportation facilities, fleets, buildings, and equipment to minimize use of fuel supplies and energy sources and reduce greenhouse gas emissions. The project is not capacity-increasing and therefore the operation would not increase energy usage.

Energy usage would be required during construction but would be minimized whenever possible through recycling of materials and implementation of greenhouse gas reduction strategies. Construction of the soldier pile wall is necessary to repair the failing embankment slope and maintain the safety and reliability of the State Route 41 corridor.

The following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Energy
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

2.1.7 Geology and Soils

Geotechnical investigations for this project would be completed after the environmental document is finalized. It is anticipated that construction of the soldier pile wall would improve geologic and soil conditions at the project site because it would stabilize the slope and repair landslide damage.

Considering this information and the information included in the Paleontology Review Memo dated March 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: ii) Strong seismic ground shaking?	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iii) Seismic-related ground failure, including liquefaction?	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 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

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

2.1.8 Greenhouse Gas Emissions

Considering the information included in the Climate Change Technical Report dated November 2020 and the Air Quality, Noise, and Water Quality Technical Memo dated November 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Greenhouse Gas Emissions
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact

Affected Environment

Regulatory agencies take greenhouse gas emissions inventory estimates to track the amount of greenhouse gasses discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual greenhouse gas emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. The U.S. Environmental Protection Agency is responsible for documenting greenhouse gas emissions nationwide, and the California Air Resources Board does so for the state, as required by Health and Safety Code Section 39607.4.

The California Air Resources Board sets regional targets for California's 18 Metropolitan Planning Organizations to use in their Regional Transportation Plan/Sustainable Communities Strategy to plan future projects that will cumulatively achieve greenhouse gas reduction goals. Targets are set at a percent reduction of passenger vehicle greenhouse gas emissions per person from 2005 levels. The proposed project is located in San Luis Obispo County; therefore, the Metropolitan Planning Organization is the San Luis Obispo Council of Governments. Their regional reduction targets are 3 percent by 2020 and 11 percent by 2035. The San Luis Obispo Council of Governments Regional Transportation Plan/Sustainable Communities Strategy for the project area is the 2019 Regional Transportation Plan; Connecting Communities. The proposed project, however, is not included in the Strategy.

The San Luis Obispo Council of Governments 2019 Regional Transportation Plan identifies the four primary approaches to practice environmental stewardship:

- Integrate environmental considerations in all stages of planning and implementation.
- Preserve aesthetic resources and promote environmental enhancements.
- Reduce greenhouse gas emissions from vehicles and improve air quality in the region
- Conserve and protect natural, sensitive, and agricultural resources.

The San Luis Obispo Council of Governments Sustainable Community Strategies includes four primary approaches to reducing vehicles trips and vehicles-miles-traveled:

- Support expanded transit service and increased frequency of transit service within and between communities to reduce vehicle trips and vehicle miles of travel
- Support local jurisdictions' efforts to improve active transportation infrastructure to replace some short vehicle trips with bike and walk trips.
- Support the addition of peak-hour express transit to reduce vehicle congestion on major highways, and other primary transportation corridors.

The Conservation Element of the San Luis Obispo County 2010 General Plan contains numerous air quality goals and policies aimed to reduce greenhouse gas emissions and vehicle miles traveled. Notable goals and policies relevant to transportation projects include:

- Goal AQ 1: Per capita vehicle-miles-traveled countywide will be substantially reduced consistent with statewide targets.
- Goal AQ 4: Greenhouse gas emissions from County operations and communitywide sources will be reduced from baseline levels by a minimum of 15% by 2020.

Environmental Consequences

Operational Emissions

Long-term changes in greenhouse gas emissions are not anticipated for the proposed project because the project would not increase the capacity or vehicle miles travelled on State Route 41. Non-capacity increasing projects generally cause minimal or no increase in operational greenhouse gas emissions in the long-term.

Construction Emissions

Short-term increases in greenhouse gas emissions are expected during project construction. Construction greenhouse gas emissions would result from material processing and operation of onsite construction equipment. There may also be a slight increase in greenhouse gas emissions produced by vehicles due to construction-related traffic delays or out-of-direction travel by travelers seeking to avoid the construction area. These greenhouse gas emissions would be produced at different levels throughout the construction phase.

The expected construction-generated greenhouse gas emissions were quantified based on project-specific construction data provided for the project, using the Caltrans Construction Emissions Tool. Greenhouse gas emissions would total about 80 tons of carbon dioxide equivalents over the duration of project construction (200 working days or about 10 months). Carbon dioxide equivalent is a measure used to compare emissions from a variety of greenhouse gasses based on their global warming potential. For this project, the carbon dioxide equivalent calculation considers carbon dioxide and the converted equivalent amounts of methane, nitrous oxide, and hydrofluorocarbons.

The frequency and occurrence of greenhouse gas emissions during the construction period would be reduced by following Caltrans' Standard Plans and Standard Specifications and Best Management Practices. All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all California Air Resources Board emission reduction regulations. All construction contracts also include Caltrans Standard Specifications Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions that reduce construction vehicle emissions, also help reduce greenhouse gas emissions.

In addition, certain project features would help reduce or offset greenhouse gas emissions. The transportation management plan would be designed to limit the length of lane closures and to minimize unnecessary traffic delays. A

wider northbound shoulder would improve the facility for bicyclists, supporting the use of alternate forms of transportation. Replanting trees and other native vegetation would sequester carbon. Finally, greenhouse gas emissions during construction would be partially offset by the anticipated decrease in maintenance and rehabilitation activities.

Overall, though some greenhouse gas emissions during construction would be unavoidable, implementation of Caltrans standard specifications, best management practices, and avoidance and minimization measures would reduce impacts to less than significant.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures would help offset greenhouse gas emissions during project construction.

GHG-1: Reduce construction waste and maximize the use of recycled materials, including reusing the concrete K-rail barrier currently shielding the failing slope, and stockpiling pavement grindings for future use.

GHG-2: Conduct construction environmental training to provide construction personnel with information regarding methods to reduce greenhouse gas emissions-related to construction.

GHG-3: Improve carbon sequestration rates through application of compost prior to seeding in disturbed areas, use of compost socks in place of straw wattles.

2.1.9 Hazards and Hazardous Materials

As outlined in the Hazardous Waste memo dated October 2018, there are no known hazardous waste issues or hazardous materials sites pursuant to Government Code Section 65962.5 within the project limits. Potential hazardous waste issues that may be encountered during project construction include treated wood waste, aerially deposited lead in soil, and lead paint in the yellow traffic stripe along the roadway. These materials, if encountered, would be appropriately handled, transported, and disposed of through Caltrans best management practices and standard specifications and would not create a substantial hazard to the public or environment. More detailed hazardous waste investigations would occur in the project's design phase.

The project is located along a rural highway with few public services aside from recreational opportunities. There are no schools nor airports within 0.25 miles and 2 miles, respectively, of the project. State Route 41 is listed as a primary evacuation route in the Atascadero Fire Evacuation Plan. The traffic management plan would account for emergency evacuations and therefore the evacuation plan would not be impaired. This project would not change the fire risk in this area.

Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No 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?	No 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?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

2.1.10 Hydrology and Water Quality

The project would be designed to avoid impacts to Morro Creek, and all project elements are above the floodplain of the river. The standard Best Management Practices outlined in Section 1.6 would ensure avoidance of impacts to water quality, including potential erosion during construction, as would the protocols outlined in the project specific Water Pollution Control Program.

Considering this information, and the information included in the Air Quality, Noise, and Water Quality Technical Memo dated November 2020 and the Floodplain and Climate Change Assessment dated August 2020, the following significance determinations have been made:

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

2.1.11 Land Use and Planning

The project would not change the location, function, or capacity of State Route 41, and would not physically divide an established community. The project would not conflict with the San Luis Obispo County General Plan, San Luis Obispo County Local Coastal Program, or any other policy or regulation meant to avoid or mitigate an environmental effect. See Appendix C for the coastal policy analysis completed for this project.

Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Land Use and Planning
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

2.1.12 Mineral Resources

According to the California Geologic Survey 2011 Mineral Land Classification Map for the San Luis Obispo—Santa Barbara Region, the project is located in an area with the potential for concrete aggregate resources. This mineral classification is widespread in San Luis Obispo County.

Given that the project is limited to repairing an existing facility, there would be no loss in availability of potentially present concrete aggregate resources.

Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

2.1.13 Noise

The project would not add additional lanes or capacity to the highway and therefore would not change long-term local noise levels generated by motorists. As outlined in the Air Quality, Noise, and Water Quality Technical Memo dated November 2020, short-term, temporary noise levels near the project would increase due to construction activities, but impacts would be minimized with Implementation of Caltrans' Best Management Practices pertaining to noise and Standard Specification Section 14-8.02 (see Section 1.6).

Considering this information, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less Than Significant
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

2.1.14 Population and Housing

The project would not change the capacity or function of State Route 41 and would therefore not influence population growth. Considering this information, the following significance determinations have been made:

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

2.1.15 Public Services

Considering that the project would not trigger the need for new or modified public services, the following significance determinations have been made:

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

2.1.16 Recreation

No recreational facilities are present within the project limits and the project would not influence the use of local recreational facilities because it would not change the function or capacity of the highway. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Recreation
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact
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

2.1.17 Transportation

The project overall would increase the reliability of the State Route 41 corridor and improve the facility for cyclists by widening the northbound shoulder to 8 feet. The project would not increase the capacity of the highway and therefore would not influence vehicle miles traveled. The project therefore does not conflict with relevant transportation programs, plans, ordinances, or policies. See Appendix C for the coastal policy analysis completed for the project.

The traffic management plan proposed for the construction period includes temporary closure of the northbound lane which may result in traffic delays. Emergency vehicles would be accounted for in the traffic management plan to ensure adequate access.

The following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Transportation
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact

Question—Would the project:	CEQA Significance Determinations for Transportation
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No 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?	No Impact

2.1.18 Tribal Cultural Resources

Considering the information included in the Cultural Resources Review Memo dated July 2020 which indicates there are no tribal cultural resources near the project, the following significance determinations have been made:

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

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

2.1.19 Utilities and Service Systems

Utility relocation will be needed for construction on the proposed project but will not cause environmental impacts. Considering the information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	No 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

2.1.20 Wildfire

The project is not within or near areas or lands classified as very high fire hazard severity zones. Considering this information, the following significance determinations have been made.

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

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

2.1.21 Mandatory Findings of Significance

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant with Mitigation

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
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?	No Impact

As outlined in the Cumulative Impact Analysis Technical Report dated November 2020, the proposed project would not contribute to a cumulative effect on any resources that are in poor or declining health or would be impacted by the project. The project would also not cause substantial effects on human beings.

The following headings contain information related to question A.

Affected Environment

The project would affect environmental resources surrounding Post Mile 3.1 on State Route 41. The scope of this project would be limited to restoring the damaged roadway through construction of a new soldier pile wall. Related features such as repaving, guardrail replacement, and utility relocation would also be performed.

With implementation of Caltrans best management practices, standard specifications, and other measures, the environmental resources that have the potential to be affected by the project would be limited to visual and aesthetic resources, greenhouse gas emissions, and biological resources.

Environmental Consequences

Overall, the project is not expected to substantially degrade the quality of the environment. The project would result in a minor reduction of the rural character and visual quality of the project area that would be reduced to less than significant with implementation of the avoidance and minimization measures listed in Section 2.1.1. It is anticipated that after project construction and revegetation the project would generally go unnoticed by the highway traveler.

Some greenhouse gas emissions would occur during construction due to emissions from construction equipment, processing of construction materials, and emissions from vehicles due to minor traffic delays. Impacts would be less than significant with the implementation of Caltrans standard specifications, best management practices, and the avoidance and minimization measures listed in Section 2.1.8.

For biological resources the proposed project has been designed to avoid and minimize effects as much as feasible, such as by avoiding work in Morro Creek and protecting several oak trees. However, the project would result in impacts to coast live oak riparian woodlands, riparian areas under the jurisdiction of the California Coastal Commission and California Department of Fish and Wildlife, Valley Needlegrass Grassland (a habitat of concern), and the special status plant and animal species they provide habitat for, including California red-legged frog and red-legged frog critical habitat. The project is not expected to impact Essential Fish Habitat. With implementation of measures BIO-1 through BIO-24, especially the compensatory mitigation proposed in Mitigation Measures BIO-3 and BIO-6, impacts to biological resources would have a less than significant effect on the environment. See Section 2.1.4 for further discussion.

Avoidance, Minimization, and/or Mitigation Measures

No additional avoidance, minimization, or mitigation measures are proposed.

Appendix A Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION

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Making Conservation
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November 2019

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."*

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page:
<https://dot.ca.gov/programs/business-and-economic-opportunity/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 Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

A blue ink signature of Toks Omishakin, consisting of a stylized 'T' followed by a cursive 'O' and a horizontal line.

Toks Omishakin
Director

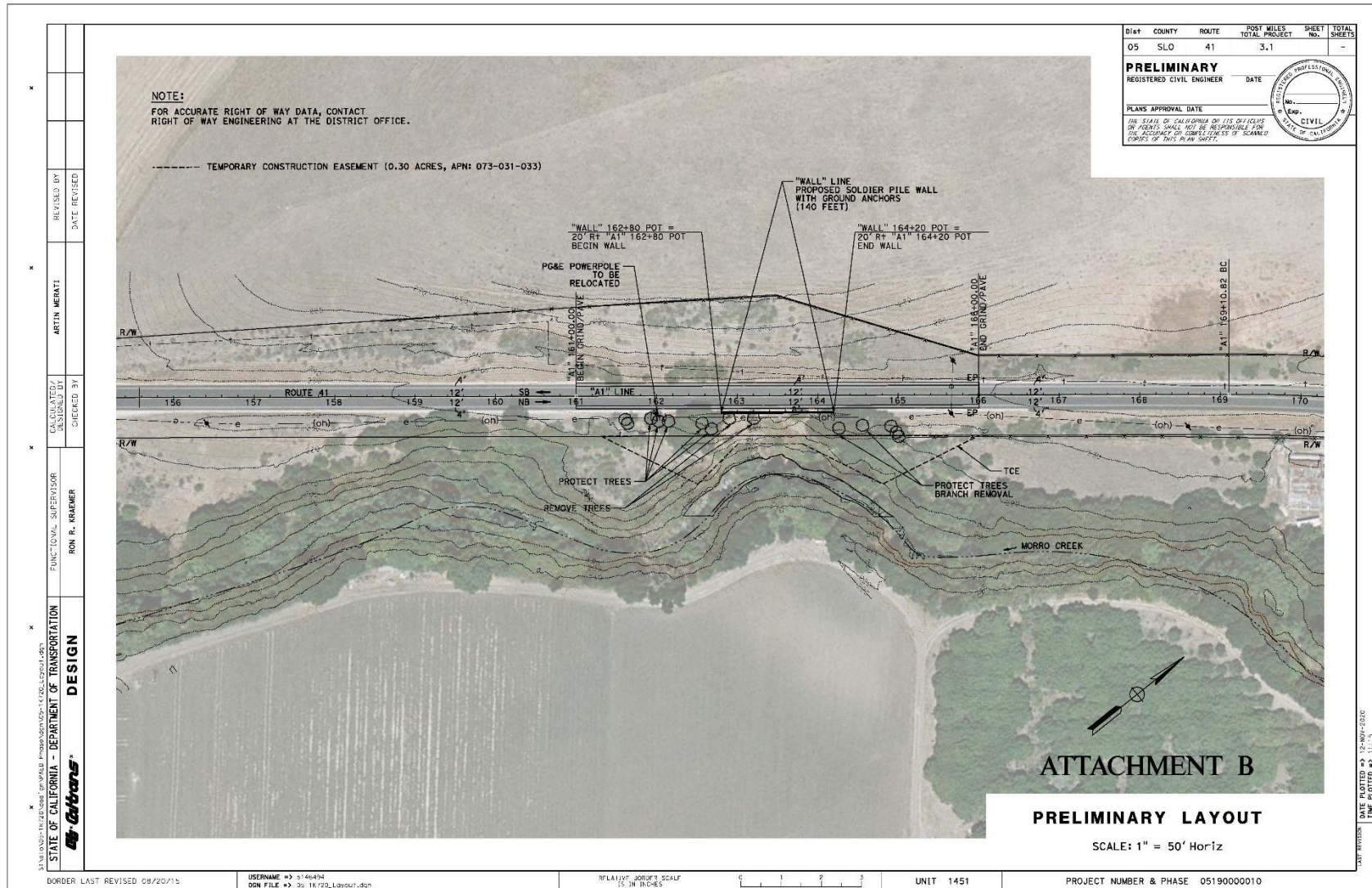
"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Appendix B Preliminary Project Plans

This appendix contains preliminary project plans that show the proposed soldier pile wall in cross-section and layout views.

Acronyms used in the plans include:

- AB = aggregate base
- e = electrical line
- oh = overhead
- EP = edge of pavement
- ES = edge of shoulder
- ETW = edge of traveled way
- FG = finish grade (proposed ground surface after construction)
- HMA = hot-mix asphalt
- NB = northbound
- OG = original grade (original ground surface, before construction)
- PG&E = Pacific Gas & Electric
- PG = profile grade
- PM = post mile
- R/W = right-of-way
- SB = southbound
- STA = station
- TCE = temporary construction easement
- VAR = variable





Appendix C Coastal Policy Analysis

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

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

Just as the federal Coastal Zone Management Act delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments to enact their own local coastal programs. The proposed project is subject to the County of San Luis Obispo local coastal program. Local coastal programs contain the ground rules for development and protection of coastal resources in their jurisdiction consistent with the California Coastal Act goals. A Federal Consistency Certification would be needed as well. The Federal Consistency Certification process would be initiated prior to final environmental document and would be completed to the maximum extent possible during the NEPA process.

The County of San Luis Obispo General Plan includes the Land Use Element and Local Coastal Program that was adopted by the County Board of Supervisors and certified by the California Coastal Commission in 1988 and was last updated in 2007. The Land Use Element contains a local coastal program policy document outlining coastal plan policies for the county. The proposed project is located within the San Luis Bay Planning Area, which has a separate report describing land use policies and development standards for communities in the planning area. The Estero Area Plan was adopted and certified in 1988 with the County General Plan and was last updated in 2009.

Coastal Policy Analysis

The following section includes a listing of the policies from Chapter 3 of the California Coastal Act (Resource Planning and Management Policies) and the County of San Luis Obispo's Local Coastal Program and Estero Area Plan. Relevant ordinances from the San Luis Obispo County Code – Title 23, Coastal Zone Land Use Ordinance are also discussed.

The relevant policies from each plan and ordinance have been grouped together by subject. For each policy, a determination was made for whether the proposed project is consistent with coastal zone policies, and a discussion is provided.

Policies for resources that would not be affected by the project have not been included.

Public Access and Circulation

Relevant Policies

California Coastal Act, Chapter 3:

- 30211—Development not to Interfere with Access

County of San Luis Obispo Local Coastal Program:

Coastal Plan Policies, Shoreline Access Chapter:

- Policy 8—Minimizing Conflicts with Adjacent Uses

San Luis Obispo County Code—Title 23, Land Use Ordinance

- 23.04.420—Coastal Access Required

Consistency Analysis

Traffic delays on State Route 41 may occur during project construction due to temporary closure of the northbound lane. The transportation management plan proposed for the construction period would ensure that coastal access via State Route 41 would be maintained at all times. Ultimately, by repairing the failing embankment, the project would ensure consistent coastal access via State Route 41.

No coastal policy inconsistencies are anticipated.

Visual and Scenic Resources

Relevant Policies

California Coastal Act, Chapter 3:

- 30251—Scenic and Visual Qualities

County of San Luis Obispo Local Coastal Program:

Coastal Plan Policies, Visual and Scenic Resources Chapter:

- Policy 1—Protection of Visual and Scenic Resources
- Policy 5—Landform Alterations
- Policy 7—Preservation of Trees and Native Vegetation
- Policy 8—Utility Lines within View Corridors

Estero Area Plan, Rural Land Use Policies (Chapter 4)

- Policy B6—Protect the scenic vistas of the morros.

San Luis Obispo County Code—Title 23, Land Use Ordinance

- 23.04.210—Visual Resources
- 23.05.120—Underground Utilities

Consistency Analysis

As described in more detail in the Aesthetics Section (Section 2.1.1), project construction would result in minor changes to the visual environment, but with implementation of avoidance and minimization measures, these changes would generally go unnoticed once construction is complete and the replacement vegetation has established. Scenic vistas of hills and riparian areas would remain intact, vegetation would be preserved as much as feasible, and there would be minimal alterations to landforms that are within public view. The project would be consistent with most visual policies.

The project may be potentially inconsistent with Policy 8, Utility Lines within View Corridors, and Ordinance 23.05.120, Underground Utilities. These recommend that utility lines within public view corridors should be placed underground whenever feasible. Construction of the project would require relocation of the existing overhead lines that run along the northbound shoulder to provide the vertical clearance needed for heavy equipment to safely access the site. Caltrans is working with Pacific Gas & Electric to evaluate the possibility of undergrounding the utilities at this location. Preliminary results suggest that undergrounding is not recommended due to the possibility of slope movement, which could shear the utility lines and conduit, causing a disruption in service for the surrounding community.

If the existing overhead utility lines are not undergrounded, they would be relocated to the southbound side of the highway, near the top of a slope within Caltrans right-of-way. The poles and lines would no longer have a backdrop of vegetation and would be located at a higher elevation because of the existing hill on the southbound side. Because overhead utility poles and lines are commonly seen throughout the area, the change would be largely unnoticed by the casual observer.

Archaeological and Paleontological Resources

Relevant Policies

California Coastal Act, Chapter 3:

- 30244—Archaeological or Paleontological Resources

County of San Luis Obispo Local Coastal Program:

Coastal Plan Policies, Archaeology Chapter:

- Policy 1—Protection of Archaeological Resources
- Policy 6—Archaeological Resources Discovered during Construction or through Other Activities

Consistency Analysis

There are no known archaeological resources located within or adjacent to the project area, and the area has a low potential for the presence of paleontological resources.

While archaeological and paleontological resources are not anticipated to be encountered, standard specifications that cover appropriate handling of these resources if they are to be inadvertently discovered have been included in the project. Therefore, the project would be consistent with coastal policies related to archaeological and paleontological resources.

Hazards and Hazardous Waste

Relevant Policies

California Coastal Act, Chapter 3:

- 30232—Oil and Hazardous Substance Spills

County of San Luis Obispo Local Coastal Program:

Coastal Plan Policies, Hazards Chapter:

- Policy 2—Erosion and Geologic Stability

Consistency Analysis

There are no hazardous waste sites or businesses commonly associated with hazardous waste generation near the project. Implementation of Caltrans Best Management Practices, Standard Specifications, and the measures included in the Water Pollution Control Program would limit the potential for hazardous waste spills to occur, and provide instructions for the appropriate containment, cleanup, and handling of hazardous substances due to accidental spills. The project would therefore be consistent with California Coastal Act policy 30232.

The purpose of the project is to address slope instability after a slipout event on State Route 41. The project would be constructed using current design

standards in the Highway Design manual to minimize hazards from landslides and earthquakes, therefore the geologic stability of the project area would be improved. Erosion would be limited during and after construction. The project would be consistent with the Erosion and Geologic Stability policy in the County of San Luis Obispo Local Coastal Program.

Air Quality and Greenhouse Gas

Relevant Policies

California Coastal Act, Chapter 3:

- 30253 c, d—Minimization of Adverse Impacts: pollution; energy conservation

Consistency Analysis

The project would not add additional lanes or capacity to the highway, therefore no long-term changes in emissions would result. By incorporating appropriate engineering design and following the Best Management Practices and standard specifications (see Section 1.6) during construction, minimal short-term air quality impacts would be expected. Implementation of the Greenhouse Gas Reduction Strategies listed in Section 2.1.8 would help to offset greenhouse gas emissions during project construction.

No coastal policy inconsistencies are anticipated.

Water Quality and Erosion

Relevant Policies

California Coastal Act, Chapter 3:

- 30231—Biological Productivity; Water Quality

County of San Luis Obispo Local Coastal Program:

Coastal Plan Policies, Coastal Watersheds Chapter:

- Policy 1—Preservation of Groundwater Basins
- Policy 8—Timing of Construction and Grading
- Policy 9—Techniques for Minimizing Sedimentation
- Policy 10—Drainage Provisions
- Policy 11—Preserving Groundwater Recharge

Estero Area Plan, Rural Land Use Policies (Ch. 4)

- Policy A—Open Space

Estero Area Plan, Circulation Policies (Ch. 5)

- Policy A6—Allow use of permeable and environmentally friendly surfaces.

- Policy A7—Incorporate water quality design and treatment Best Management Practices.

Estero Area Plan, Areawide Water Quality (Ch.6)

- Policy A1—Maintain quality and productivity of coastal water streams, wetlands, estuaries, and lakes.
- Policy A2—Control and prevention of nonpoint source pollutions
- Policy A3—Avoid impacts to watershed from erosion, runoff, pollution, and water diversions.
- Policy A4—Minimize erosion, siltation, and water pollution by promoting BMP's and minimizing the amount of impervious surfaces.

Consistency Analysis

The proposed project includes measures to treat storm water runoff, limit erosion, and protect groundwater and the water quality of Morro Creek; details would be included in the Water Pollution Control Program prepared prior to construction. No policy inconsistencies are anticipated.

Environmentally Sensitive Habitat Areas; Biological Resources

Relevant Policies

California Coastal Act, Chapter 3:

- 30233—Diking, Filling or Dredging
- 30236—Water Supply and Flood Control
- 30240—Environmentally Sensitive Habitat Areas; Adjacent Developments

County of San Luis Obispo Local Coastal Program:

Coastal Plan Policies, Environmentally Sensitive Habitats Chapter:

- Policy 1—Land Uses Within or Adjacent to Environmentally Sensitive Habitats
- Policy 3—Habitat Restoration
- Policy 7—Protection of Environmentally Sensitive Habitats
- Policy 13—Diking, Dredging or Filling of Wetlands
- Policy 16—Adjacent Development
- Policy 20—Coastal Streams and Riparian Vegetation
- Policy 21—Development in or Adjacent to a Coastal Stream
- Policy 25—Streambed Alteration
- Policy 26—Riparian Vegetation
- Policy 27—Stream Diversion Structures
- Policy 28—Buffer Zone for Riparian Habitat

Estero Area Plan, Environmental and Cultural Resources Programs (Ch.6)

- Policy B1—Protection and Management of Sensitive Habitats

San Luis Obispo County Code—Title 23, Land Use Ordinance

- 23.05.060—Tree Removal
- 23.07.160—Sensitive Resource Areas
- 23.07.170—Environmentally Sensitive Habitats

Consistency Analysis

The project would be designed to avoid Morro Creek—no project elements would extend below the 100-year floodplain of the creek. There would be no substantial alteration of the Morro Creek channel and no stream diversion structures would be required.

The project would require minor permanent impacts and tree removals within coast live oak riparian woodlands, which are considered a coastal wetland and environmentally sensitive habitat area. However, these impacts are for a necessary public service project and the project would incorporate appropriate avoidance, minimization, and mitigation measures. The ecological function and productivity of the riparian woodlands would not be substantially degraded.

The project would also temporarily impact special status species that inhabit the coast live oak woodlands and surrounding areas, including California red-legged frog and red-legged frog critical habitat. It is expected that the project would qualify for the Programmatic Biological Opinion for California red-legged frog between Caltrans and the U.S. Fish and Wildlife Service. With the implementation of the measures included in the Biological Opinion and the other avoidance, minimization, and mitigation measures outlined in Section 2.1.4, Biological Resources, impacts to special status species would be reduced, and the project would be consistent with coastal policies.

Overall, with the incorporation of avoidance, minimization, and mitigation measures, the project would be consistent with coastal policies related to wetlands and coastal environmentally sensitive habitat areas, and biological resources. See Section 2.1.4, Biological Resources for more information.

Required Permits

Relevant Policies

County of San Luis Obispo Local Coastal Program:

Coastal Plan Policies, Environmentally Sensitive Habitats Chapter:

- Policy 2—Permit Requirement
- Policy 22—Fish and Game Review of Streambed Alteration
- Policy 23—County Review of Coastal Stream Projects

Coastal Plan Policies, Public Works Chapter:

- Policy 7—Permit Requirements

Consistency Analysis

Section 1.8 outlines the permits, licenses, agreements, and certifications that would be required for project construction. No policy inconsistencies are anticipated.

List of Technical Studies Bound Separately (Volume 2)

Air Quality, Noise, and Water Quality Technical Memo, November 2020

Climate Change Technical Report, November 2020

Cultural Resources Review Screening Memo, July 2020

Cumulative Impact Analysis Technical Report, November 2020

Floodplain and Climate Change Assessment Memo, August 2020

Hazardous Waste Memo, October 2018

Natural Environment Study, November 2020

Paleontology Review Memo, March 2020

Visual Impact Assessment, July 2020

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to:

Lara Bertaina
Senior Environmental Planner
Caltrans, District 5
50 Higuera Street
San Luis Obispo, CA 93401

Or send your request via email to: Lara Bertaina, lara.bertaina@dot.ca.gov
Or call: 805-542-4610

Please provide the following information in your request:

Project title: Morro Road Soldier Pile Wall
General location information: District 5-SLO-Route 41-Postmile 3.1
EA 05-1K720 and Project ID number: 05-1900-0001