Coastlands II Retaining Wall

On State Route 1 in Monterey County at post mile 44.34, 1.1 miles south of Pfeiffer Canyon Bridge near Big Sur
05-MON-01-PM 44.34
Project ID Number 0521000188

Initial Study
with Proposed Negative Declaration

Volume 1 of 2

Prepared by the
State of California Department of Transportation

April 2023

General Information About This Document

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

What you should do:

- Please read the document. Additional copies of the document and the related technical studies are available for review at the Caltrans district office at 50 Higuera Street, San Luis Obispo, California 93401 between 8 a.m. and 5 p.m.. This document may be downloaded at the following website: https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects/05-1p210.

- Tell us what you think. If you have any comments regarding the proposed project, please request a virtual public meeting and/or send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Lara Bertaina, District 5 Environmental Division, 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: May 28, 2023.

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

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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, District 5 Environmental Division, California Department of Transportation, 50 Higuera Street, San Luis Obispo, California 93401; phone number 805-779-0792 (Voice), or use the California Relay Service 1-800-735-2929 (Teletype to Voice), 1-800-735-2922 (Voice to Teletype), 1-800-855-3000 (Spanish Teletype to Voice and Voice to Teletype), 1-800-854-7784 (Spanish and English Speech-to-Speech), or 711.

05-MON-01-PM 44.34
Project ID Number 0521000188

Replace a failed retaining wall on State Route 1 at post mile 44.34 in Monterey County

INITIAL STUDY
with Proposed Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation
and
Responsible Agency: California Transportation Commission

Jason Wilkinson

Jason Wilkinson
Acting Deputy District Director
California Department of Transportation
CEQA Lead Agency

4/19/23

Date

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

Lara Bertaina, Environmental Branch Chief, 50 Higuera Street, San Luis Obispo, California 93401; 805-779-0792; lara.bertaina@dot.ca.gov

DRAFT
Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: pending

District-County-Route-Post Mile: 05-MON-01-PM-44.34

EA/Project Number: EA 05-1P210 and Project ID Number 0521000188

Project Description

The California Department of Transportation (Caltrans) proposes to replace the failed Coastlands II Retaining Wall and add barrier systems for traveler safety on State Route 1. Other work would include the removal of the existing soil nail wall, reconstruction of the drainage inlet and culvert located near the southern terminus of the existing wall, restoration of the roadway, and removal of vegetation and trees within the area where the wall and rails would be constructed. Project activities would occur on State Route 1 at post mile 44.34 in Monterey County, roughly 1.1 miles south of Pfeiffer Canyon Bridge near Big Sur.

Determination

An Initial Study has been prepared by Caltrans District 5. On the basis of this study, it is determined that the proposed action with the incorporation of the identified avoidance and minimization measures 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, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, tribal cultural resources, and wildfire.

In addition, the project would have less than significant effects to aesthetic resources, air quality, biological resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, transportation, and utilities and service systems.

_____

Jason Wilkinson
Acting Deputy District Director
California Department of Transportation

_____

Date

Table of Contents

Chapter 1 Proposed Project 1
1.1 Introduction 1
1.2 Purpose and Need 1
1.2.1 Purpose 1
1.2.2 Need 2
1.3 Project Description 2
1.4 Project Alternatives 6
1.4.1 Build Alternatives 6
1.4.2 No-Build (No-Action) Alternative 10
1.5 Alternatives Considered but Eliminated From Further Discussion 10
1.6 Standard Measures and Best Management Practices Included in All Build Alternatives 11
1.7 Discussion of the NEPA Categorical Exclusion 12
1.8 Permits and Approvals Needed 12
Chapter 2 CEQA Evaluation 15
2.1 CEQA Environmental Checklist 15
2.1.1 Aesthetics 15
2.1.2 Agriculture and Forestry Resources 19
2.1.3 Air Quality 20
2.1.4 Biological Resources 22
2.1.5 Cultural Resources 35
2.1.6 Energy 36
2.1.7 Geology and Soils 37
2.1.8 Greenhouse Gas Emissions 40
2.1.9 Hazards and Hazardous Materials 45
2.1.10 Hydrology and Water Quality 48
2.1.11 Land Use and Planning 49
2.1.12 Mineral Resources 50
2.1.13 Noise 50
2.1.14 Population and Housing 53
2.1.15 Public Services 53
2.1.16 Recreation 54
2.1.17 Transportation 54
2.1.18 Tribal Cultural Resources 56
2.1.19 Utilities and Service Systems 56
2.1.20 Wildfire 58
2.1.21 Mandatory Findings of Significance 59
Appendix A Title VI Policy Statement 63
Appendix B Coastal Policy Analysis 65
Appendix C Avoidance, Minimization, and/or Mitigation Summary 87

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration, is the lead agency under the National Environmental Policy Act (known as NEPA). Caltrans is the lead agency under the California Environmental Quality Act (known as CEQA). As NEPA lead, Caltrans is preparing a separate Categorical Exclusion for the proposed project. As CEQA lead, Caltrans has prepared this Initial Study with Proposed Negative Declaration document for the project.

Caltrans proposes to replace the failed Coastlands II Retaining Wall and add barrier systems for traveler safety on State Route 1. Project activities would occur on State Route 1 at post mile 44.34 in Monterey County, roughly 1.1 miles south of Pfeiffer Canyon Bridge near Big Sur. The project limits are within the coastal zone, and the project area falls within the Big Sur Coast Land Use Planning Area of Monterey County. State Route 1 through the project area is a two-lane Designated National Scenic Byway and All-American Road with one lane of travel in each direction. Figure 1-1 shows the project vicinity, and Figure 1-2 shows the locations where improvements are proposed.

The project is programmed in the 2023 State Highway Operation and Protection Program with funding from the Major Damage – Permanent Restoration Program to address the failure of the existing retaining wall. Other elements, such as the connecting barrier system, were assessed throughout the project limits and added to the project as feasible. Project construction is slated to begin in 2026 and span approximately nine months. The current programmed cost for the construction of both Build Alternatives is $3,276,000.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of this project is to stabilize a failing slope that is threatening the highway facility and improve safety for motorists and cyclists traveling along State Route 1 near Big Sur. Excess water from large rain events can degrade the steep embankment slopes that are characteristic of the Big Sur region. Slope failure due to oversaturation can lead to instability of the roadway surface, which undermines the functional use of the southbound travel lane. The project would minimize the potential for future rain events to compromise the stability of State Route 1 through the project limits. Installing continuous barrier rails throughout the project limits next to the southbound shoulder

would improve safety for travelers by reducing the risk of running off the road due to collision, road alignment, or operating conditions.

1.2.2 Need

The project is needed to address the failure of the existing retaining wall. As a result of the January 27, 2021, storm that passed over the Big Sur Coast, the soil behind the mechanically stabilized embankment wall on State Route 1 at post mile 44.34 became oversaturated and caused the retaining wall to fail. The slope has continued to degrade after the failure of the mechanically stabilized embankment wall, which threatens the paved highway and the private water line located just below the wall. There are no permanent barrier rails installed along the seaward side of the highway through the project limits, and district traffic safety guidance recommends closing the gap between the installations of barrier rails at the Coastlands and Coastlands II retaining walls.

1.3 Project Description

Earth Retaining Systems

Caltrans proposes to build a soldier pile wall at post mile 44.34 on the seaward side of the highway. The existing mechanically stabilized earth wall, located at post mile 44.34, is approximately 150 feet in length. The proposed replacement retaining wall would be approximately 190 feet long. ST-75B Bridge Rails would be installed along the top of the soldier pile wall, and crash cushions would be installed on the end blocks of the wall.

The proposed retaining wall would feature 24 steel soldier piles sunk vertically into concrete backfilled holes, with timber boards serving as horizontal lagging between the piles. The visible height (partially viewed from the roadway) of the exposed soldier piles would vary from approximately 0 feet to 23 feet, and the depth of the backfilled holes would vary between approximately 5 feet and 25 feet, depending on the elevation of the hillslope at the base of the wall. The timber lagging acts as a wall that holds the slope in place and transfers the pressures of the confined soil to the soldier piles. Construction of the new soldier pile wall would require the removal of the existing wall and the excavation of excess soil from the slope.

The wall would be constructed using a top-down method, with vertical drilling to create holes for the emplacement of the steel soldier piles. Temporary access would be established during construction from the southbound shoulder of State Route 1, extending to the bottom of the failed retaining wall. This temporary access location would be used to allow construction equipment to remove the existing failed wall once the roadway is stabilized with piles during reconstruction and would also facilitate the completion of

other work items, such as final grading and drainage construction that would be performed at the bottom of the wall.

Other work pertaining to the installation of the new retaining wall would include the removal of vegetation and trees within the area where the wall and rails would be constructed. Native nonornamental trees removed as part of the project would be replanted using the same species as those removed onsite at a 1-to-1 replacement ratio. A temporary signal for one-way traffic control is proposed for use during project construction.

Barrier Systems

The Coastlands Retaining Wall, which is currently under construction at post mile 44.45, lies approximately 225 feet to the north of the project on the seaward side of the highway. This retaining wall is a soldier pile wall featuring an ST-75B Bridge Rail with a length of 80 feet. Crash cushions extend approximately 22 feet beyond the bridge rails on both sides for a total length of approximately 124 feet of barrier system at post mile 44.45.

If crash cushions were installed along the southern terminus of the Coastlands retaining wall and the northern terminus of the Coastlands II retaining wall, there would be a gap of approximately 175 feet where there would be no rails between the two retaining walls. Safety regulations recommend that gaps of less than 200 feet between guardrail installations should be avoided. Caltrans proposes to close the gap between the barriers associated with the new retaining wall and the northern Coastlands retaining wall with barrier rails to protect the traveling public. The closure of this gap with barrier rails eliminates the need for crash cushions between the southern terminus of the Coastlands retaining wall and the northern terminus of the proposed Coastlands II retaining wall.

There are two proposed build alternatives: Build Alternative 1 proposes ST-75B Barrier Rail as the connecting rail and Build Alternative 2 proposes the Midwest Guardrail System as the connecting rail. The design and construction of the soldier pile retaining wall, pavement rehabilitation, and drainage improvements would remain the same in both build alternatives. Both alternatives feature a total of 225 feet of barrier rails to close the gap between the two retaining walls. More information about the two build alternatives is included in Section 1.4, Project Alternatives.

Pavement Rehabilitation

The existing damaged asphalt concrete pavement next to the proposed retaining wall would be restored by grinding and overlaying with new pavement. The pavement type that would be used would be appropriate for temperature conditions in Monterey County.

Drainage Improvements

An existing drainage system on the southern end of the failed retaining wall would be replaced during the construction of the new wall.

Two drainage inlets would be placed along the top of the new soldier pile wall, and the existing headwall inlet system next to the northbound shoulder would remain in place. All three inlet systems would direct flow to the same downdrain, which would be replaced with a new 24-inch corrugated steel pipe. The new downdrain would maintain the well-established existing outlet location below the base of the new retaining wall, if possible. The culvert located beneath the southbound travel lane of State Route 1 that connects the existing headwall inlet system to the new downdrain would be replaced within the southbound section of the road using a 36-inch corrugated steel pipe culvert. The existing portion of the culvert located beneath the northbound travel lane would be connected to the new section of the culvert with a concrete collar.

Figure 1-1 Project Vicinity Map

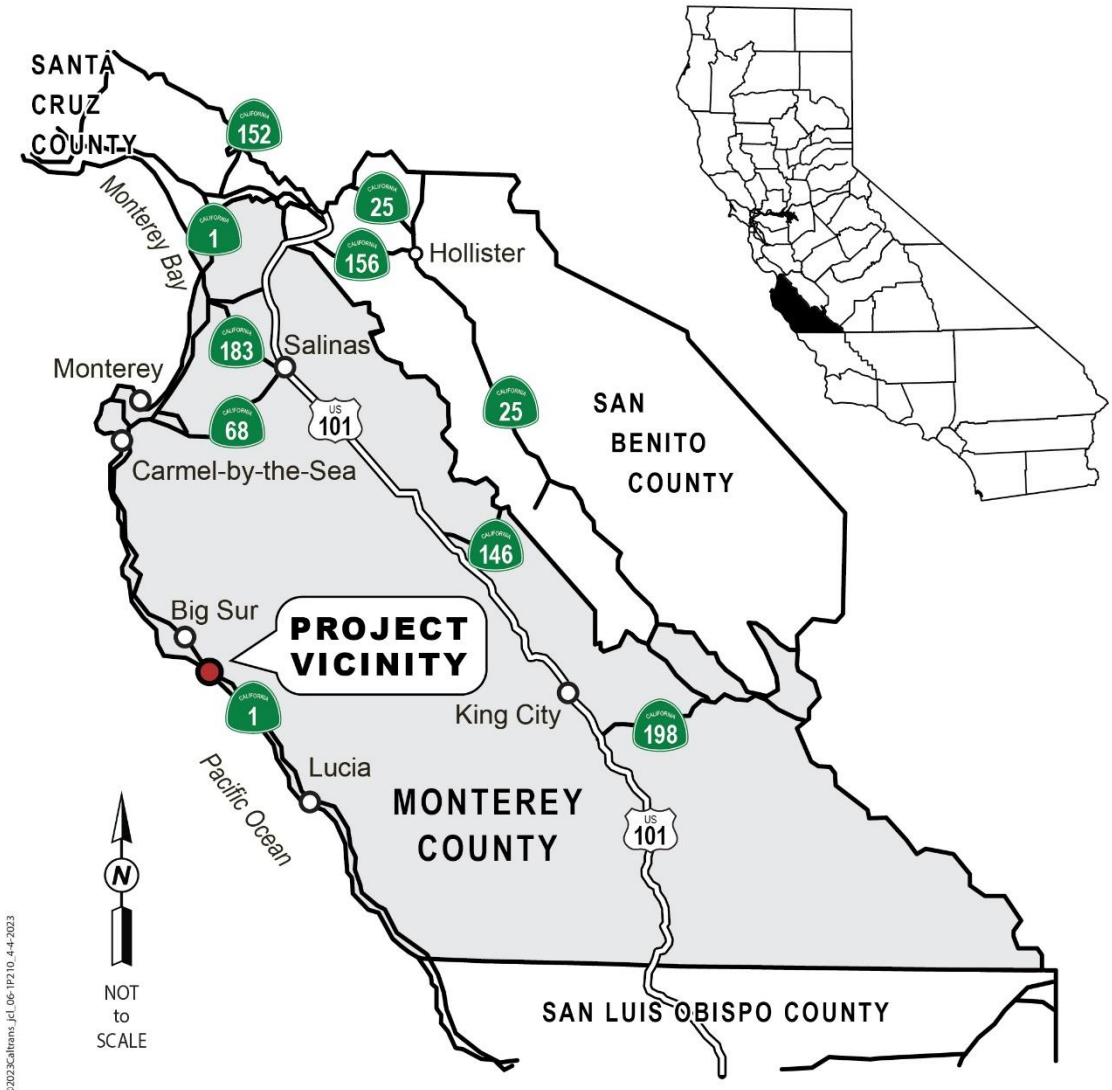
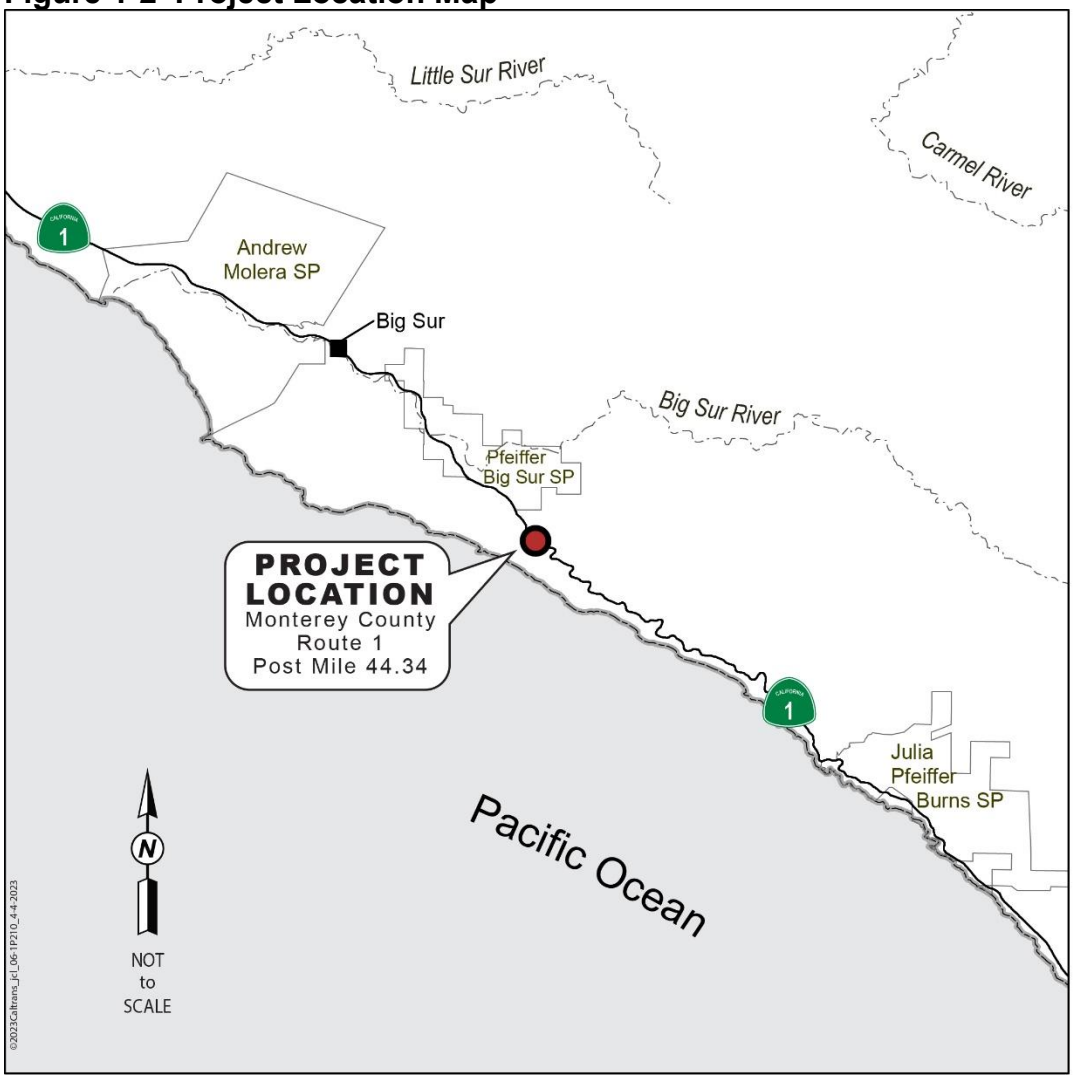


Figure 1-2 Project Location Map



1.4 Project Alternatives

Three alternatives are under consideration for the project: Two Build Alternatives featuring different kinds of barrier systems and a No-Build Alternative.

The alternatives were developed by an interdisciplinary team. Several criteria were taken into consideration when evaluating the various alternatives for the project, including the project's purpose and need, cost, design, construction strategies, and environmental impacts.

1.4.1 Build Alternatives

Under the Build Alternatives, the project would result in temporary and permanent impacts to environmental resources. Temporary impacts would

result from the various construction activities required to complete the project. Permanent impacts would result from the new highway features and elements that would be constructed.

The Build Alternatives would meet the purpose and need of the project by replacing the failed retaining wall and addressing the lack of a barrier system through the project limits while also providing additional improvements to drainage and paving rehabilitation. The work would be done in stages, with construction occurring over a period of about nine months.

There are two proposed build alternatives: Build Alternative 1 proposes ST-75B Barrier Rail as the connecting rail and Build Alternative 2 proposes Midwest Guardrail System as the connecting rail.

Build Alternative 1: ST-75B Barrier Rail

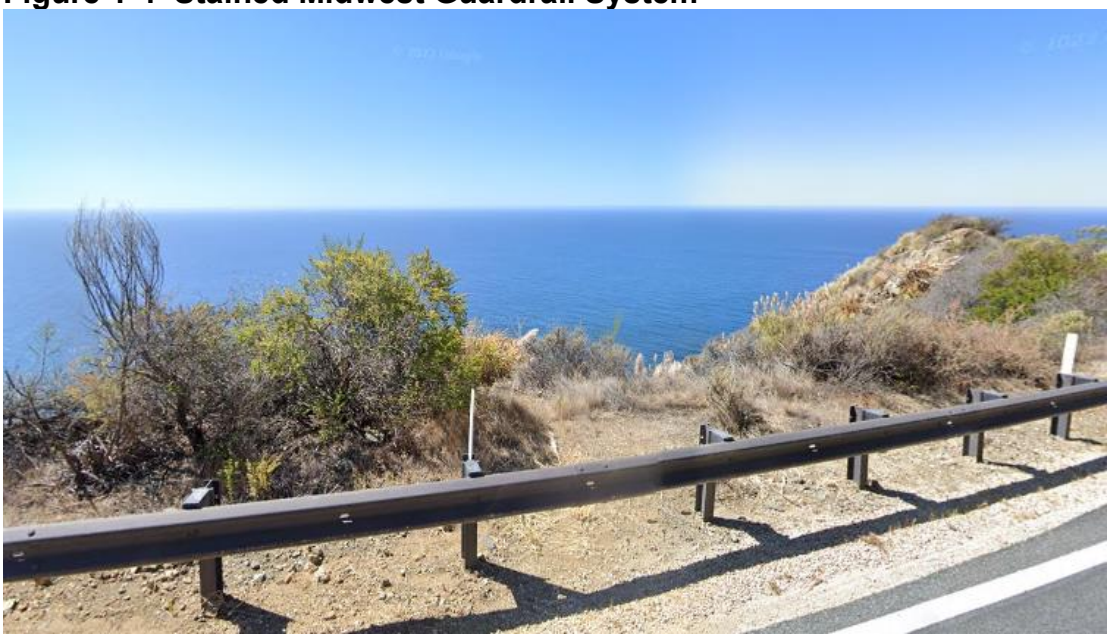
The ST-75B Barrier Rail is a steel post and beam style bridge rail on a concrete curb that would be connected to a concrete anchor slab with reinforcing, anchor bolts, and anchor bars. ST-75B Barrier Rail is a standard variant of an ST-75B Bridge Rail with an independent 2 foot 2 inch wide by 2 foot 6 inch minimum height foundation. Figure 1-3 shows ST-75B Bridge Rail installed atop the Coastlands retaining wall, which would be similar in appearance to ST-75B Barrier Rail. The maximum height of the ST-75B Barrier Rail is 3 feet 6 inches. The spacing of the beams of the ST-75B Barrier Rail allows viewers to see through the structure. If the ST-75B Barrier Rail build alternative is selected, there would be about 500 feet of nearly continuous ST-75B Bridge Rail variants on southbound State Route 1 from post miles 44.34 to 44.45.

Figure 1-3 Stained ST-75B Bridge Rail

Build Alternative 2: Midwest Guardrail System

The Midwest Guardrail System is made up of “W-shaped” metal beam rail elements mounted on wood or plastic blocks fastened to wood or galvanized steel posts. Figure 1-4 features an example of stained Midwest Guardrail System installed near Torre Canyon in the Big Sur Region. The maximum height of the Midwest Guardrail System is 2 feet 8 inches. Two Midwest Guardrail System Transition Railings would be used to connect the Midwest Guardrail System to the bridge rails installed along the nearby Coastlands and Coastlands II retaining walls. If the Midwest Guardrail System build alternative is selected, there would be approximately 500 feet of mixed barrier rail systems, including ST-75B Bridge Rails and the Midwest Guardrail System on southbound State Route 1 from post miles 44.34 to 44.45.

Figure 1-4 Stained Midwest Guardrail System



Common Design Features of the Build Alternatives

All exposed steel elements of the guardrail for both alternatives would be darkened or stained to reduce glare, visually recede, and appear more consistent with the natural character of the Big Sur setting, as depicted in Figures 1-3 and 1-4. Both alternatives feature a total of 225 feet of barrier rails to close the gap between the two retaining walls. As previously stated, the design of all other project elements is the same in both build alternatives.

Unique Features of the Build Alternatives

Railings and Railing Spacing

The spacing of the beams of the ST-75B Barrier Rail allows viewers to see through the structure. The “W-shaped" metal beam guardrail elements used in Build Alternative 2 do not have cutouts or other spacing, and viewers cannot see through the structure.

Footings and Post Spacing

The ST-75B Bridge Rail features a reinforced concrete footing with 10-foot maximum post spacing. The Midwest Guardrail System has evenly spaced posts at 6 feet 3 inches and no concrete footing. The Midwest Guardrail System posts would be emplaced directly into the southbound shoulder.

Height

The ST-75B Bridge Rail used in Build Alternative 1 would reach a height of 3 feet 6 inches above the finished southbound shoulder. The Midwest Guardrail System in Build Alternative 2 would be 2 feet 7 inches above the finished southbound shoulder.

Drainage

The Midwest Guardrail System can either emplace a channelized dike in front of the rails to carry water runoff or allow for flow between posts off the edge of the roadway, depending on hydraulic and environmental requirements.

The ST-75B Bridge Rail would not allow for the free flow of water off the shoulder without further drainage design due to its curb and reinforced concrete footing. If the ST-75B Bridge Rail build alternative is selected, parts of the roadway between the Coastlands and Coastlands II walls that previously drained off the southbound shoulder would instead drain toward the two drainage inlets along the Coastlands II wall. District 5 Hydraulics has determined the drainage system would have enough capacity for the increased flow and for larger storm events.

The 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 project. These measures are listed later in this chapter under “Standard Measures and Best Management Practices Included in All Build Alternatives.”

1.4.2 No-Build (No-Action) Alternative

Under the No-Build Alternative, State Route 1 would stay as it is within the project limits. The work proposed in this project would not be done. The No-Build Alternative would not address the purpose and need of the project. The slope behind the failed retaining wall would continue to deteriorate, which could lead to degradation of the roadway. While routine maintenance would continue under the No-Build Alternative, no improvements to the roadway would occur.

1.5 Alternatives Considered but Eliminated From Further Discussion

Build Alternative 3, which featured the construction of a soldier pile retaining wall with no barrier systems to connect the Coastlands and Coastlands II retaining walls, was considered. However, this build alternative did not address the project’s purpose and need and did not satisfy the recommendation from district traffic safety. This alternative was eliminated from further discussion during a project development team meeting on October 18, 2022.

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

This project includes Caltrans standard measures that are typically used on all Caltrans projects. Caltrans standard measures are considered features of the project and are evaluated as part of the project. Caltrans standard measures are not implemented to address any specific effects, impacts, or circumstances associated with the project but are instead implemented as part of the project's design to address common issues encountered on projects. Caltrans standard measures allow for little discretion regarding their implementation, just as other Caltrans standards requirements. The measures listed here are those related to environmental resources and are applicable to the project. These measures can be found in Caltrans' 2018 Standard Specifications document.

- 7-1 Legal Relations and Responsibility to the Public
- 10-4 Water Usage
- 10-5 Dust Control
- 10-6 Watering
- 12-1 Temporary Traffic Control
- 12-3 Temporary Traffic Control Devices
- 12-4 Traffic Control Systems
- 13-1 Water Pollution Control
- 13-2 Water Pollution Control Program
- 13-4 Job Site Management
- 13-6 Temporary Sediment Control
- 13-7 Temporary Tracking Control
- 13-10 Temporary Linear Sediment Barriers
- 14-1 Environmental Stewardship
- 14-2 Cultural Resources
- 14-6 Biological Resources
- 14-8 Noise and Vibration

- 14-9 Air Quality
- 14-10 Solid Waste Disposal and Recycling
- 14-11 Hazardous Waste and Contamination
- 14-12 Other Agency Regulatory Requirements
- 17-2 Clearing and Grubbing
- 18-1 Dust Palliatives
- 20-1 Landscape
- 20-3 Planting
- 20-4 Plant Establishment Work
- 21-2 Erosion Control Work
- 36-4 Residue Containing Lead from Paint and Thermoplastics
- 84-9 Removing Existing Marking

Additional measures would be added to the project as necessary or appropriate.

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, has been 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—that is, species protected by the Federal Endangered Species Act).

1.8 Permits and Approvals Needed

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

Agency	Permit/Approval	Status
Monterey County	Coastal Development Permit	Would be obtained before construction starts
California Coastal Commission	Coastal Development Permit	Would be obtained before construction starts
U.S. Fish and Wildlife Service	Programmatic Biological Opinion; California Red-Legged Frog	Would be obtained before the final environmental document is signed

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant Impact With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project 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 in the Visual Impact Assessment dated February 23, 2023, 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?	**Less Than Significant Impact**
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	**Less Than Significant Impact**

Question—Would the project:	CEQA Significance Determinations for Aesthetics
c) In nonurbanized 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 landform of the region is generally characterized by steep slopes and ravines forming a series of ridgelines and valleys as the mountains rise from the Pacific Ocean. The topography supports a mostly curvilinear roadway that produces views for the highway traveler ranging from close-in views of the inland slopes to mid-range coastline views and wide-open panoramas. The Pacific Ocean is visible throughout much of the route and can be seen from the project site.

Throughout the region, vegetation is a primary component of visual character. Although native plant communities are the most visually prevalent, exotic plants such as pampas grass have established themselves at various locations along the highway corridor. Landscape planting is generally associated with the scattered residential and commercial development along the highway through the nearby Big Sur village area.

Throughout the project limits, built developments have a low visual presence in the landscape. In general, the scale and frequency of structures and other built amenities throughout this area are such that although visible, they don't dominate the views when seen in the context of the overall landscape. Due to the topography throughout much of the region, cut slopes are associated with the highway facility and can often be seen from the road.

Scenic vistas throughout the project area primarily include expansive mid-to-distant views of the Pacific Ocean, dramatic topography and hillsides, native vegetative patterns, and undeveloped landscapes.

State Route 1 has long been recognized for its scenic qualities, and the state and national scenic designations illustrate the heightened degree of sensitivity concerning the aesthetic character of the highway. Monterey County planning

policies emphasize the protection of visual resources along State Route 1 and underscore the concern and sensitivity regarding aesthetic issues along this route. The project is within the coastal zone, which emphasizes visual quality preservation. In addition, the Big Sur Coast Highway Management Plan (Caltrans 2003), a comprehensive planning document developed with extensive community input, includes a section on identifying and preserving the scenic qualities of the route. The local communities have a history of active participation in projects involving potential changes to the visual environment.

Environmental Consequences

The most noticeable aspect of the project would be the addition of the ST-75B Bridge Rails on the southbound side of the highway constructed along the length of the wall. Depending on the height of the viewing position, views from the roadway to the Pacific Ocean would be affected to some degree by the bridge rails. Because the retaining wall is below the roadway, the viewing opportunities are limited; however, the curvature of the roadway allows brief and partial views of the new wall. The wall would be stained or painted to reduce its reflectivity and noticeability in the landscape. Over time, the visibility of the wall would decrease as the site revegetates and becomes established. While the removal of trees from the project area may be noticeable, it would allow a larger viewing opportunity of the Pacific Ocean.

The project is also proposing to close the gap on the southbound shoulder between the Coastlands wall and the Coastlands II wall with either an ST-75B Barrier or the Midwest Guardrail System.

Although the ST-75B Barrier is an open-style design, it is taller than the Midwest Guardrail System and would reduce the viewing opportunity of the Pacific Ocean from the roadway by approximately one additional foot.

As a result of these changes, the highway environment in the immediate project vicinity would be somewhat altered. While the project would not substantially degrade the existing visual quality or character of public views, there would be a minor reduction in character. Although the effect on the scenic vista would be minimal under either alternative, there would be more of an effect on the scenic vista if the ST-75B Barrier Rail is used to close the gap instead of the Midwest Guardrail System.

The existing scenic quality and character of the Big Sur Coast are based to a large degree on its undeveloped setting, rugged topography, sweeping ocean views, and native vegetation patterns. The wall itself is located below the roadway elevation and would be stained or painted to reduce its reflectivity and noticeability in the landscape. While the removal of trees may contribute to the reduction in vegetated character, trees located to the north and south of the proposed wall would remain. After the site is revegetated, the completed wall would be generally unnoticed by highway travelers.

Although visual changes would occur, the same type of elements proposed with this project are seen elsewhere along the Big Sur Coast and are not, by themselves, inconsistent with the rural roadway character of the region or throughout the state. The roadway north and south of the project site would remain curved and unwidened. As a result, the proposed wall and associated section of the ST-75B Bridge Rails along the length of the wall would be secondary to the overall experience of traveling along the rugged and rural coast highway.

Avoidance, Minimization, and/or Mitigation Measures

With the implementation of the following avoidance and minimization measures, the project would be consistent with the aesthetic and visual resource protection goals along State Route 1, and potential visual impacts would be reduced:

VIS 1: Preserve as much existing vegetation as possible. Prescriptive clearing and grubbing and grading techniques that save the most existing vegetation possible should be used.

VIS 2: Revegetate all areas disturbed by the project, including but not limited to temporary access roads, staging, and other areas with native plant species appropriate to each specific work location.

VIS 3: Replacement planting shall include aesthetic considerations and inherent biological goals. Replanting shall include native trees and plants as determined by a Caltrans biologist and the Caltrans District 5 Landscape Architecture Department. Replanting shall occur at the maximum extent horticulturally viable and be maintained until established.

VIS 4: Following construction, regrade and recontour any new construction access roads, staging areas, and other temporary uses as necessary to match the surrounding natural topography along State Route 1 and avoid unnatural-appearing remnant landforms.

VIS 5: All visible concrete drainage elements, including, but not limited to, headwalls, drain inlet aprons, etc., should be colored to blend with the surroundings and reduce reflectivity. The specific colors of these concrete elements shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 6: All visible metal components related to downdrains and inlets, including but not limited to flared end sections, connectors, anchorage systems, safety cable systems, etc., should be darkened or colored to blend with the surroundings and reduce reflectivity. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 7: ST-75B Bridge Rails shall be colored and/or darkened to blend with the natural setting. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 8: The concrete barrier slab associated with ST-75B shall be colored and/or darkened to blend with the nearby shoulders. The exposed top surface of the barrier slab should have an overlay or be colored to match the color of the nearby asphalt roadway lanes. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 9: All metal roadside elements, including but not limited to the Midwest Guardrail System, guardrail transitions, and end treatments, should be stained or darkened to be visually compatible with the rural setting. The color shall be determined and approved by the Caltrans District 5 Landscape Architecture Department.

VIS 10: The vertical wall piles should be colored and/or darkened to be visually compatible with the rural setting. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 11: If timber lagging is not used, then concrete lagging should be colored and/or darkened to blend with the surrounding hillside. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 12: If whalers are used, they should be colored and/or darkened to be visually compatible with the rural setting. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

2.1.2 Agriculture and Forestry Resources

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

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural 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 nonagricultural 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.

Considering the information in the Air Quality, Greenhouse Gas, and Noise Assessment Memorandum dated December 18, 2022, 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**

Question—Would the project:	CEQA Significance Determinations for Air Quality
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?	**Less Than Significant Impact**

Affected Environment

Within the project limits, State Route 1 crosses through areas zoned for rural, low-density residential development and scenic conservation.

The proposed project is in the North Central Coast Air Basin. The Monterey Bay Air Resources District regulates air quality in the project area. The North Central Coast Air Basin is considered in attainment for all federal ambient air quality standards, non-attainment transitional for state ambient air quality standards for ozone, and non-attainment for airborne particulate less than 10 microns in diameter. Additionally, this project is consistent with the Monterey Bay Unified Air Pollution Control District's state air quality attainment goals as stated in its State Implementation Plan, the *2012 to 2015 Air Quality Management Plan*, because it would not further degrade air quality in the basin.

Environmental Consequences

The project would not result in long-term impacts to air quality because the project would not alter the existing capacity of State Route 1.

Temporary construction-related activities are expected to generate minor amounts of aerial pollutants, emissions, and/or odors that could be noticeable or cause inconveniences to sensitive receptors and/or people close to the work site. The use of equipment during project construction can generate fugitive dust that may have substantial temporary impacts on local air quality if large amounts of excavation, soil transport, and subsequent fill operations are necessary. Because minor earthwork is expected to be required for this project, minimal dust generation would also be expected. In addition, the project would include Caltrans standard measures associated with minimizing impacts to air quality.

Due to the use of standard construction dust and emission minimization practices and procedures, it is expected that project emissions of particulate

matter and equipment emissions would be well within the daily thresholds of the Monterey Bay Air Resources District.

Construction emissions are further calculated and discussed in Section 2.1.8, Greenhouse Gas Emissions.

Avoidance, Minimization, and/or Mitigation Measures

The potential for air quality impacts generated by project construction would be minimized with the implementation of the following measure:

AIR 1: To minimize dust emissions from the project, Section 14-9.02 (Air Pollution Control) of the 2018 Standard Specifications states that the contractor is responsible for complying with all local air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the contract, including those provided in Government Code Section 11017 (Public Contract Code Section 10231). Incorporate appropriate engineering design and Stormwater Best Management Practices during construction.

2.1.4 Biological Resources

Considering the information in the Natural Environment Study (Minimal Impacts) dated February 27, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration Fisheries?	**Less Than Significant Impact**
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Biological Resources
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	**No Impact**
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	**Less Than Significant Impact**
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**Less Than Significant Impact**
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	**Less Than Significant Impact**

Affected Environment

The Biological Study Area is defined as the area of land that may be directly, indirectly, temporarily, or permanently impacted by construction, construction-related activities, and vehicles. Caltrans defined the proposed construction area, synonymous with the Area of Potential Impact, as the area where project-related work would affect the ground and vegetation. The Biological Study Area includes the Area of Potential Impact, a 50-foot buffer around the Area of Potential Impact, and the Caltrans right-of-way on State Route 1 at post mile 44.34. This buffer accounts for biological resources directly next to the Area of Potential Impact and for impacts that may result from inadvertent actions.

The proposed project is next to the southbound lane of State Route 1, 3 miles south of Big Sur. The project's Biological Study Area encompasses the Caltrans right-of-way along State Route 1 and private property to the west of the right-of-way.

The land within the Biological Study Area consists of the paved travel way of State Route 1, ruderal/disturbed vegetation, and oak woodland habitat immediately next to the roadway. The proposed project includes some natural plant communities with areas interspersed with disturbed soil. The elevation of the proposed work location is about 970 feet above sea level. No tidally influenced or brackish areas are present within the Biological Study Area.

Queries and official species lists were used to develop a list of special-status species and natural communities that have the potential to occur within the Biological Study Area. Sensitive species and habitats with the potential to be present in the project impact area were further researched and prioritized for identification during field surveys.

General biological and botanical field surveys were conducted in April, May, July, and November 2022 to identify potential special-status species. Floristic surveys were conducted within a range of months when target special-status species were flowering and identifiable, following the guidelines of the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. General reconnaissance-level wildlife surveys coincided with the botanical, wildlife species, and habitat surveys and were documented in the Natural Environment Study.

Natural Communities

Natural communities identified within the Biological Study Area include coast live oak woodlands and ruderal/invasive communities.

Coast Live Oak Woodlands

The coast live oak woodland is mainly comprised of coast live oak *(Quercus agrifolia)* specimens and a lightly developed shrub and herb layer. The occurrence of coast live oak woodland encompasses most of the Biological Study Area. Dominant plant species present in coast live oak woodland within the project area include California buckeye *(Aesculus californica),* poison oak *(Toxicodendron diversilobum),* orange bush monkeyflower *(Diplacus aurantiacus),* and California sagebrush *(Artemisia californica),* in addition to coast live oaks.

Ruderal/Disturbed Communities

Ruderal/disturbed areas are dominated by non-native weedy and invasive species tolerant of disturbed conditions like compacted soils and roadsides subjected to vehicle disturbances. The edges of State Route 1 are mostly vegetated with ruderal/disturbed species. Representative species include red brome *(Bromus madritensis ssp. rubens),* slender oat *(Avena barbata),* and various other weedy species and annual grasses.

Invasive Species

A total of 10 invasive plant species were found within the Biological Study Area, as shown in Table 2.1. Of these, two have an invasive rating of “high,” six have an invasive rating of “moderate,” and two have an invasive rating of “limited,” based on the California Invasive Plant Council Database. The distribution of the most invasive plant species is sparsely scattered throughout the Biological Study Area and most commonly located in ruderal/disturbed areas along the edges of the highway facility.

Table 2.1 Exotic, Invasive Plant Species as Identified by the California Invasive Plant Council Observed Within the Biological Study Area

Common Name	Scientific Name	California Invasive Plant Council Database Rating
French broom	*Genista monspessulana*	High
pampas grass	*Cortaderia selloana*	High
red brome	*Bromus rubens*	High
Bermuda buttercup	*Oxalis pes-caprae*	Moderate
Italian thistle	*Carduus pycnocephalus*	Moderate
black mustard	*Brassica nigra*	Moderate
purple false brome	*Brachypodium distachyon*	Moderate
slender oat	*Avena barbata*	Moderate
sticky snakeroot	*Ageratina adenophora*	Moderate
pride of Madeira	*Echium candicans*	Limited
rattlesnake grass	*Briza maxima*	Limited

Special-Status Species

Special-status species include 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 19 special-status plant species and 15 special-status animal species to occur within the Biological Study Area and surrounding areas.

Special-Status Plant Species

Within the project area are 19 documented special-status plant species that include federally and state-listed plants, as listed in Table 2.2. None of these special-status plant species are expected to occur within the Biological Study Area due to a lack of potential habitat, and specimens were not observed during appropriately timed studies; therefore, they are not discussed any further in this document.

Table 2.2 Federally and State-Listed Special-Status Plant Species Not Expected To Occur Within the Biological Study Area

Common Name	Scientific Name
Adobe sanicle	*Sanicula maritima*
Arroyo Seco bush-mallow	*Malacothamnus palmeri var. lucianus*
Blasdale's bent grass	*Agrostis blasdalei*
Bristlecone fir	*Abies bracteata*
Compact cobwebby thistle	*Cirsium occidentale var. compactum*
Cone Peak bedstraw	*Galium californicum ssp.luciense*
Dudley's lousewort	*Pedicularis dudleyi*
Fragrant fritillary	*Fritillaria liliacea*
Hutchinson's larkspur	*Delphinium hutchinsoniae*
Jolon clarkia	*Clarkia jolonensis*
Little Sur manzanita	*Arctostaphylos edmundsii*
Maple-leaved checkerbloom	*Sidalcea malachroides*
Muir's tarplant	*Carlquistia muirii*
San Luis Obispo sedge	*Carex obispoensis*
Santa Lucia bedstraw	*Galium clementis*
Talus fritillary	*Fritillaria falcata*
Tear drop moss	*Dacryophyllum falcifolium*
Toren's grimmia	*Grimmia torenii*
Umbrella larkspur	*Delphinium umbraculorum*

Special-Status Animal Species

Within the project area are 16 documented special-status animal species that include federally and state-listed species. Fourteen of the possible 16 special-status animal species are not expected to occur within the Biological Study Area due to a lack of potential habitat, as listed in Table 2.3. These species were not observed during appropriately timed studies and are not discussed further in this document.

Table 2.3 Federally and State-Listed Special-Status Animal Species Not Expected To Occur Within the Biological Study Area

Common Name	Scientific Name
Dolloff Cave spider	*Meta dolloff*
Globose dune beetle	*Coelus globosus*
Monarch – California overwintering population	*Danaus plexippus pop. 1*
Pinnacles optioservus riffle beetle	*Optioservus canus*
Smith's blue butterfly	*Euphilotes enoptes smithi*
Steelhead – South Central California Coast Distinct Population Segment	*Oncorhynchus mykiss irideus pop. 9*
Coast Range newt	*Taricha torosa*
Foothill yellow-legged frog	*Rana boylii*
Western pond turtle	*Emys marmorata*
Black swift	*Cypseloides niger*
Double-crested cormorant	*Nannopterum auritum*
Prairie falcon	*Falco mexicanus*
American badger	*Taxidea taxus*
Townsend's big-eared bat	*Corynorhinus townsendii*

The presence of one special-status animal species—the California red-legged frog—was inferred during field surveys, and potential habitat was documented for nesting birds and bats.

The California Natural Diversity Database species list does not include any special-status communities or habitats that occur within the U.S. Geological Survey quadrangles of Pfeiffer Point, Big Sur, Ventana Cones, and Partington Ridge.

California red-legged frog

The California red-legged frog is federally threatened and considered a species of special concern by the California Department of Fish and Wildlife. This frog historically ranged from Marin County southward to northern Baja California. Currently, Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining California red-legged frog populations in California. No protocol surveys were conducted for the California red-legged frog, and the species was not seen during general wildlife surveys. There are known occurrence records for the California red-legged frog within 1 mile of the Biological Study Area, and the presence of the species in the Biological Study Area is inferred.

The project's Biological Study Area is located entirely within the federally designated California red-legged frog Critical Habitat Unit Monterey County 3, "Big Sur Coast." This unit stretches from Little Sur River south to McWay Canyon and encompasses about 27,542 acres. The Big Sur Coast unit includes locations in and around the Big Sur River drainage and includes the following watersheds: Point Sur, Big Sur River, Ventana Creek, Sycamore Canyon, and Partington Creek. This unit is considered essential for the conservation of the species because it contains the largest coastal habitat within the Monterey Bay region and provides connectivity to more interior units farther north. This unit contains permanent and ephemeral aquatic habitats for breeding, nonbreeding, and upland and dispersal habitats.

Nesting Birds and Bats

No federally or state-listed bird species were identified as having the potential to occur in the project area, and none were found during surveys. However, trees, shrubs, and crevices within the project area provide potential nesting habitats for various bird species. No nesting birds were seen in the Biological Study Area during surveys but there is potential for future nesting activity. Any 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.

While roosting habitat was evaluated, focused surveys for bats were not performed. No evidence of roosting or maternal colonies of bats was found in the project area. Some of the older trees in the Biological Study Area could potentially serve as roosting habitat for Townsend's big-eared bat. However,

the trees slated for removal are not of great enough size to create the cavernous habitat essential for this species. No other species of bats are expected to occur within the project area, and no other species were observed.

Environmental Consequences

Natural Communities

To access the project site during construction, a total of eight trees under 15 inches in diameter at breast height must be removed: five Monterey cypresses, one California buckeye, and two coast live oaks, as shown in Table 2.4. One Monterey cypress and one coast live oak planned for removal have a diameter at breast height of less than 6 inches. Those trees requiring removal with a diameter at breast height greater than 6 inches will be replaced at a 1-to-1 ratio, as space allows.

Table 2.4 Trees Slated for Removal Within the Biological Study Area

Common Name	Scientific Name	Diameter at Breast Height (Inches)
Monterey cypress	*Hesperocyparis macrocarpa*	13.5
Monterey cypress	*Hesperocyparis macrocarpa*	13
Monterey cypress	*Hesperocyparis macrocarpa*	10
Monterey cypress	*Hesperocyparis macrocarpa*	7.75
Monterey cypress	*Hesperocyparis macrocarpa*	4
California buckeye	*Aesculus californica*	10
coast live oak	*Quercus agrifolia*	9
coast live oak	*Quercus agrifolia*	5

Invasive Species

Ground disturbance and other construction-related activities associated with the project could potentially spread or introduce invasive species within the Biological Study Area. The project would include avoidance and minimization measures that would help reduce the spread or introduction of invasive species within the areas disturbed by the project.

Special-Status Plant Species

Large portions of the project area contain ruderal/disturbed habitat that is mostly unsuitable for the special-status plant species identified in the literature search. No federally or state-listed plant species were identified as having the potential to occur in the project area, and none were found during surveys.

Special-Status Animal Species

The Biological Study Area is located within the designated critical habitat for the California red-legged frog *(Rana draytonii)* and has the potential to support Smith's blue butterfly *(Euphilotes enoptes smithi).*

Smith's blue butterfly is a federally endangered species that uses seacliff buckwheat *(Eriogonum parvifolium)* and seaside buckwheat *(Eriogonum latifolium)* as host plants for all life stages. Appropriately timed surveys indicated no presence of buckwheat species within the Biological Study Area, and Smith's blue butterfly is not expected to occur in the project area.

California red-legged frog

The California red-legged frog is a federally threatened species and a state species of special concern. No individuals were observed during reconnaissance surveys. Additionally, no physical or biological features for California red-legged frogs exist within the Biological Study Area to provide suitable aquatic breeding or aquatic nonbreeding habitat. Marginal habitat for dispersal exists within the Biological Study Area and consists of the paved roadway, steep slopes with patches of bare ground and pampas grass clumps, with a few pockets of willows and a poison oak understory. The nearest aquatic feature to the project limits is Post Creek, located about 350 feet northeast of the project area, with no records of California red-legged frog observations. Two ponds at the Post Ranch Inn are about 1,000 feet north of the project area, and both ponds have observations of various life forms of the species as recently as 2006. The habitat within the Biological Study Area is unlikely to support individuals. However, given the proximity of the Biological Study Area to a known breeding pond and since protocol-level surveys were not possible due to the steepness of the terrain and poor night safety, this project may affect, likely to adversely affect, the California red-legged frog.

The proposed project is expected to qualify for the Federal Endangered Species Act incidental take coverage under the U.S. Fish and Wildlife Programmatic Biological Opinion (81440-2010-F-0382) for California red-legged frogs.

Nesting Birds and Bats

The federal Migratory Bird Treaty Act protects native North American migratory birds, nests, and eggs. The California Fish and Game Code Sections 3503, 3513, and 3800 also protect migratory birds. Five native trees have a diameter at breast height greater than 4 inches that must be removed to gain necessary construction access to the site. These trees have the potential to support native birds for nesting, foraging, and cover.

The project is not expected to result in impacts to potential nesting habitat for the Townsend's big-eared bat due to the lack of signs indicating the presence of individuals or their roosts. Tree removal for this project is not expected to impact Townsend's big-eared bat because the trees slated for removal are not large enough to provide the cavernous conditions required by the species.

Avoidance, Minimization, and/or Mitigation Measures

Natural Communities

BIO 1: Native, nonornamental trees removed that have a diameter at breast height of greater than 6 inches may be replanted, as required, at a 1-to-1 ratio to mitigate for visual resources and biological resource-related habitat loss.

Invasive Species

Executive Order 13112 directs federal agencies to combat the introduction or spread of invasive plant species in the U.S. The following avoidance and minimization measures would be implemented to reduce potential impacts associated with invasive species:

BIO 2: During construction, Caltrans would ensure that the spread or introduction of invasive exotic plant species would be avoided to the maximum extent possible.

BIO 3: When practicable, invasive exotic plants in the project site shall be removed and properly disposed of. All invasive vegetation removed from the construction site shall be taken to a landfill to prevent the spread of invasive species. If the soil from weedy areas must be removed offsite, the top 6 inches of soil containing the seed layer in areas with weedy species shall be disposed of at a landfill.

BIO 4: If necessary, wash stations onsite shall be established for construction equipment under the guidance of Caltrans to avoid and minimize the spread of invasive plants and/or seeds within the construction area.

Special-Status Plant Species

While no special-status plant species were found within the project area, the following avoidance and minimization measures would be implemented to reduce potential impacts to unlisted trees and other vegetation within the Biological Study Area as a result of construction-related activities:

BIO 5: Before any ground-disturbing activities, Environmentally Sensitive Area fencing would be installed around trees and other vegetation designated to be protected within the project limits. Protection limits would be noted on design plans and delineated in the field before the start of construction activities.

California red-legged frog

The proposed project is expected to qualify for the Federal Endangered Species Act incidental take coverage under the U.S. Fish and Wildlife Service Programmatic Biological Opinion (81440-2010-F-0382). The following applicable measures from the Programmatic Biological Opinion would be implemented for this project to reduce potential impacts to the California red-legged frog:

BIO 6: Only U.S. Fish and Wildlife Service-approved biologists would participate in activities associated with the capture, handling, and monitoring of California red-legged frogs. Biologists authorized under this biological opinion do not need to resubmit their qualifications for subsequent projects conducted pursuant to this biological opinion unless we have revoked their approval at any time during the life of this biological opinion.

BIO 7: Ground disturbance would not begin until written approval is received from the U.S. Fish and Wildlife Service that the biologist is qualified to conduct the work unless the individual(s) has/have been approved previously and the U.S. Fish and Wildlife Service has not revoked that approval.

BIO 8: A U.S. Fish and Wildlife Service-approved biologist would survey the project site no more than 48 hours before the start of work activities. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist would be allowed sufficient time to move them from the site before work begins. The U.S. Fish and Wildlife Service-approved biologist would relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and that would not be affected by project construction activities. The relocation site should be in the same drainage to the extent practicable. Caltrans would coordinate with the Service on the relocation site before the capture of any California red-legged frogs.

BIO 9: Before any activities begin on the project, a U.S. Fish and Wildlife Service-approved biologist would conduct a training session for all construction personnel. At a minimum, the training would include a description of the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the California red-legged frog for the current project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

BIO 10: A U.S. Fish and Wildlife Service-approved biologist would be present at the work site until all California red-legged frogs have been relocated out of harm's way, workers have been instructed, and disturbance of habitat has been completed. After this time, the state or a local sponsoring agency would designate a person to monitor onsite compliance with all minimization measures. The U.S. Fish and Wildlife Service-approved biologist would ensure that this monitor receives the training outlined in Measure BIO 8 above and in the identification of California red-legged frogs. If the monitor or the U.S. Fish and Wildlife Service-approved biologist recommends that work be stopped because California red-legged frogs would be affected in a manner not expected by Caltrans and the Service during a review of the proposed action, they would notify the resident engineer (the engineer that is directly overseeing and in command of construction activities) immediately. The resident engineer would either resolve the situation by eliminating the

adverse effect immediately or require that all actions causing these effects be stopped. If work is stopped, the Service would be notified as soon as possible.

BIO 11: During project activities, all trash that may attract predators would be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris would be removed from work areas.

BIO 12: All refueling, maintenance, and staging of equipment and vehicles would occur at least 60 feet from riparian habitat or water bodies and in a location where a spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water). The monitor would ensure contamination of habitat does not occur during such operations. Before the start of work, Caltrans would ensure that a plan is in place for a prompt and effective response to any accidental spills. All workers would be informed of the importance of preventing spills and the appropriate measures to take should a spill occur.

BIO 13: Habitat contours would be returned to their original configuration at the end of project activities. This measure would be implemented in all areas disturbed by activities associated with the project unless the Service and Caltrans determine that it is not feasible or modification of original contours would benefit the California red-legged frog.

BIO 14: The number of access routes, the size of staging areas, and the total area of the activity would be limited to the minimum necessary to achieve the project goals. Environmentally Sensitive Areas would be delineated to confine access routes and construction areas to the minimum area necessary to complete construction and minimize the impact to California red-legged frog habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable.

BIO 15: Caltrans would attempt to schedule work activities for times of the year when impacts to the California red-legged frog would be minimal. For example, work that would affect large pools that may support breeding would be avoided, to the maximum degree practicable, during the breeding season (November through May). Isolated pools that are important in maintaining California red-legged frogs through the driest portions of the year would be avoided, to the maximum degree practicable, during the late summer and early fall. Habitat assessments, surveys, and coordination between Caltrans and the Service during project planning would be used to assist in scheduling work activities to avoid sensitive habitats during key times of the year.

BIO 16: To control sedimentation during and after project implementation, Caltrans and the sponsoring agency would implement the best management practices outlined in any authorizations or permits issued under

the authority of the Clean Water Act that it receives for the specific project. If best management practices are ineffective, Caltrans would attempt to remedy the situation immediately, in coordination with the Service.

BIO 17: If a work site is to be temporarily dewatered by pumping, intakes would be completely screened with wire mesh not larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. Water would be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any diversions or barriers to flow would be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the streambed would be minimized to the maximum extent possible; any imported material would be removed from the streambed upon project completion.

BIO 18: Unless approved by the Service, water would not be impounded in a manner that may attract California red-legged frogs.

BIO 19: A U.S. Fish and Wildlife Service-approved biologist would permanently remove any individuals of non-native species, such as bullfrogs *(Rana catesbeiana)*, signal and red swamp crayfish *(Pacifastacus leniusculus; Procambarus clarkii),* and centrarchid fishes from the project area to the maximum extent possible. The U.S. Fish and Wildlife Service-approved biologist would be responsible for ensuring his or her activities comply with the California Fish and Game Code.

BIO 20: If Caltrans demonstrates that disturbed areas have been restored to conditions that allow them to function as habitat for the California red-legged frog, these areas would not be included in the amount of total habitat permanently disturbed.

BIO 21: To ensure that diseases are not transported between work sites by the U.S. Fish and Wildlife Service-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force would be followed at all times. A copy of the code of practice is enclosed.

BIO 22: Project sites would be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials would be used to the extent practicable. Invasive, exotic plants would be controlled to the maximum extent practicable. This measure would be implemented in all areas disturbed by activities associated with the project unless the Service and Caltrans determine that it is not feasible or practical.

BIO 23: Caltrans would not use herbicides as the primary method used to control invasive, exotic plants. However, if Caltrans determines the use of herbicides is the only feasible method for controlling invasive plants at a

specific project site, it would implement the following additional protective measures for the California red-legged frog:

a. Caltrans would not use herbicides during the breeding season for the California red-legged frog;

b. Caltrans would conduct surveys for the California red-legged frog immediately before the start of any herbicide use. If found, California red-legged frogs would be relocated to suitable habitat far enough from the project area that no direct contact with herbicides would occur;

c. Giant reed and other invasive plants would be cut and hauled out by hand and painted with glyphosates or glyphosate-based products, such as AquaMaster® or Rodeo®.

d. Licensed and experienced Caltrans staff or a licensed and experienced contractor would use a hand-held sprayer for foliar application of AquaMaster® or Rodeo® where large monoculture stands occur at an individual project site;

e. All precautions would be taken to ensure that no herbicide is applied to native vegetation.

f. Herbicides would not be applied on or near open water surfaces (no closer than 60 feet from open water).

g. Foliar applications of herbicide would not occur when wind speeds are in excess of 3 miles per hour.

h. No herbicides would be applied within 24 hours of forecasted rain.

i. Application of all herbicides would be done by qualified Caltrans staff members or contractors to ensure that overspray is minimized, that all application is made in accordance with label recommendations, and with the implementation of all required and reasonable safety measures. A safe dye would be added to the mixture to visually denote treated sites. Application of herbicides would be consistent with the U.S. Environmental Protection Agency’s Office of Pesticide Programs and Endangered Species Protection Program county bulletins.

BIO 24: Upon project completion, Caltrans shall ensure that a Project Completion Report is completed and provided to the Ventura Office of the U.S. Fish and Wildlife Service, following the template provided with the Programmatic Biological Opinion. Caltrans shall include recommended modifications of the protective measures if alternative measures would facilitate compliance with the provisions of this consultation.

Nesting Birds

The following measures apply to all birds protected by the Migratory Bird Treaty Act and California Fish and Game Code. The list of birds protected by these regulatory laws is extensive, and not all birds protected by these laws are likely to occur within the Biological Study Area.

BIO 25: Within 30 days before initiation of site disturbance and/or construction, a qualified biologist should conduct a preconstruction survey for nesting birds if vegetation disturbance or tree removal cannot be scheduled outside of the typical nesting bird season (February 14 to September 30).

BIO 26: Active bird nests would not be disturbed, and eggs or young birds covered by the Migratory Bird Treaty Act and California Fish and Game Code would not be killed, destroyed, injured, or harassed at any time (harassment includes noise from construction activities). If an active bird nest is found in or near a location that would be disturbed, a Caltrans biologist would determine an appropriate buffer based on the habits and needs of the species. An Environmentally Sensitive Area would be established, and the nest area would be avoided until the nest is vacated and the juveniles have fledged.

BIO 27: If roosting bats are discovered within the project area, the resident engineer shall immediately contact the project biologist on how to proceed. The biologist would coordinate with the California Department of Fish and Wildlife if necessary.

2.1.5 Cultural Resources

Considering the information in the Cultural Resources Screened Undertaking Memorandum dated January 9, 2023, the significance determinations summarized below have been made.

The project would not have the potential to affect cultural resources within the project limits. The project area has been studied several times for archaeological and tribal cultural resources as part of several highway projects along the State Route 1 corridor. A records search, review of photo documentation taken of the project site, aerial mapping, and tribal consultation did not reveal the presence of any areas of concern or resources.

The project site is within the Carmel-San Simeon Highway Historic District, which extends about 75 miles along State Route 1, between post mile 71.34 in San Luis Obispo County and post mile 72.28 in Monterey County. The district consists of 241 contributing resources, including 234 rustic-style rubble masonry features (158 culvert headwalls, 61 parapet walls, 10 retaining walls, and five fountains), in addition to seven concrete arch bridges.

The period of significance for the Carmel-San Simeon Highway Historic District is 1922 through 1938, spanning from the date that highway construction began near San Simeon in 1922 until the highway was completed with the construction of the concrete arch bridge over Big Creek in 1938. The Carmel-San Simeon Highway Historic District was previously determined eligible for the National Register of Historic Places in 1996 (updated in 2006). The district is a noncontiguous area that consists only of these masonry structures and concrete bridges—the highway itself is not included as a contributing resource due to alterations that occurred after the period of significance.

The failed retaining wall at this location was built in 2003, outside the period of significance for the Carmel-San Simeon Highway Historic District. The drainage system being replaced as part of the proposed project does not contain a historic headwall and is not a contributor to the historic district. No other resources that are considered part of the Carmel-San Simeon Highway Historic District are within the project area.

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	**No Impact**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 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, maintenance of transportation facilities, fleet, equipment, and buildings to minimize the use of fuel supplies and energy resources and to reduce greenhouse gas emissions.

The project would not alter the existing vehicle capacity on State Route 1 or alter the existing alignment of State Route 1. Therefore, the project would not alter existing energy use on the State Highway System. Some energy use would be required during project construction but would be minimized whenever possible through the implementation of greenhouse gas reduction strategies during project construction. The amount of energy that would be used to construct this project would help reduce future energy use by

decreasing the number of required preventive and scheduled maintenance operations.

The project would not alter or conflict with any existing local, regional, or state plans for energy management.

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

Considering the information in the Geotechnical Design Report dated May 11, 1998, the Geotechnical Assessment and Recommendations dated May 21, 2021, Structure Preliminary Geotechnical Report dated March 16, 2022, and the Paleontological Identification Report dated December 19, 2022, the significance determinations shown in the following table have been made. The Geotechnical Design Report was prepared in support of Caltrans project 05-39850, which constructed the original retaining wall at this location in 2003. There have not been any changes to the geologic setting of the project area since 1998.

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.	**Less Than Significant Impact**
ii) Strong seismic ground shaking?	**No Impact**
iii) Seismic-related ground failure, including liquefaction?	**No Impact**
iv) Landslides?	**Less Than Significant Impact**

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
b) Result in substantial soil erosion or the loss of topsoil?	**No Impact**
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	**Less Than Significant Impact**
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	**No Impact**
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	**No Impact**
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**No Impact**

Affected Environment

The project limits lie within the Sur Region of the San Gregorio Fault System, which may be potentially active according to archived documentation on the California Geological Survey's Alquist-Priolo Site Investigation Reports online database and U.S. Geological Survey's online Quaternary Fault and Fold Database of the U.S.

California Geological Survey records indicate all faults within the project limits are not within an Alquist-Priolo Earthquake Fault Zone nor within 1,000 feet of any mapped fault that is Late Pleistocene (up to 15,000 years old) or younger.

The U.S. Geological Survey's online Interactive Fault Map indicates that the project limits lie about 500 feet and 850 feet southwest of strands of the San Gregorio Fault System that last experienced seismic activity in the Late Quaternary period (less than 130,000 years ago) and Quaternary period (less than 1.6 million years ago), respectively. Therefore, the structures are not considered susceptible to surface fault rupture hazards per Caltrans standards.

The regional geologic map of the area based on California Geological Survey Special Report 185 shows that the project site is on a mapped Quaternary landslide deposit overlaying shale and greywacke associated with the Franciscan Complex. The overall Franciscan Complex is relatively unstable

due to a mixture of stronger rocks surrounded or embedded within a weak, finer-grained matrix. The rock exposed in the cut slope above the project location is composed of shale. The bedrock at the project location is covered by 20 to 23 feet of gravelly clay weathered from the underlying shale and silty sand that was added as roadway embankment fill. Evidence of the regionally mapped landslide was not encountered in the test borings or observed at the site.

The project site is not considered susceptible to liquefaction or related seismic hazards like lateral spreading due to the dense composition of the shale and greywacke bedrock underlying the project site and the depth of groundwater (24 to 27 feet).

The U.S. Department of Agriculture's Web Soil Survey data also shows the soil within the project limits to be composed of members of the Millsholm-Gazos complex. This loamy soil type is well-draining and does not contribute to the risk of liquefaction. Unified Soil Classification System data from the U.S. Department of Agriculture's soil survey database also show the Millsholm-Gazos complex soils feature relatively low plasticity, which indicates minimal expansive clay content. The U.S. Department of Agriculture's soil survey data also indicates that the Millsholm-Gazos complex soils are considered "very limited" for use of septic tanks and other alternative wastewater disposal systems, which indicates the soil has one or more features that are unfavorable for the specified use. There are no septic tanks or alternative wastewater disposal systems included in the project, so no impacts are expected.

The U.S. Department of Agriculture's Web Soil Survey data discloses that the soil at the project location is rated severe for erosion hazards. Monterey County's online Geologic Hazards Map also rated the entire area along the project limits as a high risk for erosion.

The project is in a landslide-prone corridor along State Route 1 and is mapped as being located on Quaternary landslide deposits, according to California Geological Survey Special Report 185. The Geologic Hazards Map application from Monterey County's Geographic Information Systems Department web page also identifies the areas within the project limits to be at risk for landslides. Both seismic and/or heavy rainfall events would also contribute to the landslide hazards.

Environmental Consequences

While the project is in an area that is prone to landslides and rated as a high risk for erosion, this project is not expected to further exacerbate these risks. The purpose of this project is to stabilize a failing slope that is threatening the highway facility, and project completion would make State Route 1 through the project limits more resilient to future erosion and landslides.

The design and construction of the soldier pile retaining wall, barrier systems, and drainage improvements are supported by numerous geotechnical investigations of the area performed since 1996 and as recently as 2022, and no deficiencies in the quality or nature of the soil and bedrock have been identified.

No unique paleontological resource, site, or unique geologic feature would be destroyed during project construction. Project earthwork would be limited to areas that have been previously disturbed or to geologic units with no paleontological potential or low paleontological potential that are unlikely to contain fossils.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures related to geology and soils are proposed.

2.1.8 Greenhouse Gas Emissions

Considering the information in the Climate Change Technical Report dated February 8, 2023, the following significance determinations have been made:

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

Affected Environment

Regulatory Setting

A greenhouse gas emissions inventory estimates the amount of greenhouse gases 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. Cities and other local jurisdictions may also conduct local greenhouse gas inventories to inform their greenhouse gas reduction or climate action plans.

The California Air Resources Board sets regional greenhouse gas reduction targets for California's 18 Metropolitan Planning Organizations to achieve through planning future projects that would cumulatively achieve those goals and report how they would be met in the Regional Transportation Plan/Sustainable Communities Strategy. Targets are set at a percent reduction of passenger vehicle greenhouse gas emissions per person from 2005 levels.

The applicable Metropolitan Planning Organization for the project location is the Association of Monterey Bay Area Governments (AMBAG). The Association of Monterey Bay Area Governments' regional reduction target is to reduce emissions by 6 percent by 2035. The Association of Monterey Bay Area Governments' Regional Transportation Plan/Sustainable Communities Strategy for the project area is the *2045 Metropolitan Transportation Plan/Sustainable Communities Strategy: Moving Forward Monterey Bay 2045*. Implementation of the Plan and Strategy is expected to achieve a 4 percent per capita reduction by 2020 and a nearly 7 percent per capita reduction by 2035. The proposed project, however, is not included in the Plan.

The regional transportation planning agency for the proposed project is the Transportation Agency for Monterey County. The Transportation Agency for Monterey County's 2022 Regional Transportation Plan identifies three primary approaches to practicing environmental stewardship:

- Reduce greenhouse gas emissions consistent with the regional targets for greenhouse gas emissions in 2020 and 2035 set by the Association of Monterey Bay Area Governments.
- Avoid or minimize impacts to local, state, and federally defined sensitive areas.
- Conserve farmland resources.

Environmental Setting

The proposed project is on State Route 1 in the rural Big Sur area of Monterey County, a rugged and mountainous section of the Central Coast of California between Carmel-by-the-Sea and San Simeon.

State Route 1 through the project limits is a north-south oriented, two-lane conventional highway with 12-foot lanes. State Route 1 serves local and interregional traffic, including predominately recreational users, some local commuters, and limited commercial users. State Route 1 has a posted speed limit of 55 miles per hour through the project limits. Public transit in the region is limited, but Monterey-Salinas Transit provides bus service from Monterey and Carmel-by-the-Sea to Big Sur. Most of the region is owned by governmental or private agencies, which do not allow any

development, including in the Los Padres National Forest, Ventana Wilderness, Silver Peak Wilderness, and Fort Hunter Liggett. The climate in Big Sur is mild Mediterranean climate, characterized by sunny, dry conditions in the summer and fall and cool, wet winters. Morning coastal fog near the shore is typical in all seasons except winter, and temperatures in Fahrenheit can range anywhere from the low 40s to the high 70s throughout the year. Meanwhile, temperatures inland and at higher elevations can reach the 80s. The Big Sur region remains relatively isolated and sparsely populated, with about 2,000 year-round residents clustered near the coast and a largely uninhabited interior.

Project Adaptation Analysis

While climate change risk analysis involves uncertainties regarding the timing and intensity of potential risks, it can be used to consider project-level adaptations to respond to potential negative effects associated with the proposed project.

The project is not expected to be vulnerable to the effects of sea level rise, including inundation, cliff retreat, wave impacts, and coastal flooding. The project location is about 0.45 mile northeast and 780 feet higher in elevation than the height of coastal inundation expected from 10 feet of sea level rise under extreme climate change scenarios.

The project area is also projected to experience increased precipitation due to climate change. Indications of increased precipitation in the project area mean that Caltrans must assume higher rainfall and associated flooding and must expect more extreme storm events. The purpose of the project is to prevent future rain events from potentially compromising the stability of State Route 1 through the project limits, which would also help minimize risks posed by increased precipitation due to climate change.

The post mile location of the proposed project is in an area of “very high” wildfire hazard severity according to the California Department of Forestry and Fire Protection's Fire Hazard Severity Zone Mapping Tool. These risk levels are expected to increase under future climatic conditions. The timber lagging component of the proposed retaining wall would be treated with fire-retardant paint rated to 350 degrees Fahrenheit, and barrier rails would use fire-resistant materials when possible. The project is not expected to exacerbate the impacts of wildfires intensified by climate change or be more susceptible to wildfire damages than under the current conditions.

The project area is subject to rising average maximum and minimum temperatures compared to historical averages. The expected increases across the span of the proposed project’s design life are expected to fall within the acceptable temperature ranges for the “Central Coast” pavement type used in Monterey County. Therefore, no adaptive changes in pavement design or maintenance practices would be required.

Environmental Consequences

Operational Emissions

The purpose of the proposed project is to stabilize a failing slope that is threatening State Route 1 in Monterey County and to improve safety for motorists and cyclists by replacing a failed retaining wall and installing barrier rails. The proposed project would not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational greenhouse gas emissions. Because the project would not increase the number of travel lanes on State Route 1, no increase in vehicle miles traveled would occur. While some greenhouse gas emissions during the construction period would be unavoidable, no increase in operational greenhouse gas emissions is expected.

Construction Emissions

Construction greenhouse gas emissions would result from material processing and transportation, onsite construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

The use of long-life pavement, improved traffic management plans, and changes in materials can also help offset emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

Construction is expected to last for about 175 working days. Construction-generated greenhouse gas emissions were quantified based on project-specific construction data using the Caltrans Construction Emissions Tool (CAL-CET), which largely models the emissions from construction equipment. Greenhouse gas emissions would total about 125 tons of carbon dioxide equivalent during the estimated 175 days of project construction. Carbon dioxide equivalent is a measure used to compare emissions from various greenhouse gases based on their global warming potential. Calculating the carbon dioxide equivalent includes converting the emissions of other gases to the equivalent amount of carbon dioxide with the same global warming potential and then totaling the emissions together. For this project, the carbon dioxide equivalent calculation considers carbon dioxide and the converted equivalent amounts of methane, nitrous oxide, black carbon, and hydrofluorocarbons. Note that this estimate is based on assumptions made during the environmental planning phase of the project and is considered a “ballpark” estimate of carbon dioxide equivalent emissions, relying on limited data inputs and default modeling. In addition to construction emissions, it should be noted that traffic delays during construction may result in increased greenhouse gas emissions from vehicles and that the production and

processing of construction materials such as concrete would also produce emissions.

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

While the project would result in greenhouse gas emissions during construction, the project is not expected to increase operational greenhouse gas emissions. The project would not conflict with any applicable plan, policy, or regulation adopted to reduce the emissions of greenhouse gases. With the implementation of construction greenhouse gas reduction measures, the impact would be less than significant.

Avoidance, Minimization, and/or Mitigation Measures

The potential for greenhouse gas impacts generated by project construction would be reduced to less than significant under CEQA with the implementation of the following minimization measures:

GHG 1: Limit idling to five minutes for delivery and dump trucks and other diesel-powered equipment when not in active operation.

GHG 2: Use alternative fuels such as renewable diesel or solar power for construction equipment when available.

GHG 3: For improved fuel efficiency from construction equipment:

- Maintain equipment in proper tune and working condition
- Use right sized equipment for the job
- Use equipment with new technologies

GHG 4: Use recycled materials in the construction of new project features onsite when possible. This may include processing waste to create usable fill and maximizing the use of recycled materials that meet Caltrans specifications for incorporation into new work.

GHG 5: Reduce construction waste when possible. For example, reuse or recycle construction and demolition waste to reduce consumption of raw materials, reduce waste and transportation to landfills, and save costs.

2.1.9 Hazards and Hazardous Materials

Considering the information in the Hazardous Waste Initial Site Assessment Memorandum dated December 19, 2022, the following significance determinations have been made.

The Hazardous Waste Memorandum indicated that some potentially hazardous wastes and materials could be generated by or encountered during project construction, including lead paint found in traffic striping and aerially deposited lead-contaminated soils next to the roadway.

No project construction activities would occur within 0.25 mile of an existing or proposed school or within 2 miles of an airport.

Based on the California Department of Toxic Substances Control Hazardous Waste and Substances Site List online database, there are no known hazardous waste issues or hazardous materials sites pursuant to Government Code Section 65962.5 within the project limits.

During project construction, State Route 1 within the project limits would remain open, and access for emergency responses and/or evacuations would not be affected.

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	**Less Than Significant Impact**
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	**No Impact**
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 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**

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?	**Less Than Significant Impact**

Affected Environment

Aerially Deposited Lead

The historic use of leaded gasoline in automobiles has resulted in soils along roadways throughout California containing elevated concentrations of lead. Soil with lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016, Aerially Deposited Lead Agreement between Caltrans and the California Department of Toxic Substances Control. The Aerially Deposited Lead Agreement outlines which soils can be safely reused within the project limits and which soils must be exported and disposed of as hazardous waste.

Yellow Thermoplastic or Traffic Stripe

Yellow traffic paint purchased by Caltrans before 1997 contained high concentrations of lead. Application of yellow thermoplastic material containing high concentrations of lead continued until at least 2004 to 2006. The lead concentrations in the older yellow paint and yellow thermoplastic are high enough to make these materials hazardous wastes when they are removed.

A review of past projects in the vicinity of this project did not find any projects since the early 2000s where the yellow centerline traffic paint had been removed and replaced with lower or lead-free traffic paint. In addition, a review of the project location on Google Earth and Google Street View imagery revealed the yellow centerline stripe appeared to be old and in poor condition.

Wildland Fires

Based on the 2007 California Department of Forestry and Fire Protection Fire Hazard Severity Zone Map in State Responsibility Areas for Monterey

County, the project limits are next to areas that are considered a Very High Fire Hazard Severity Zone in a State Responsibility Area.

Environmental Consequences

Aerially Deposited Lead

Aerially deposited lead is not expected to be present within the project limits because ongoing soil erosion on the failing slope would prevent lead from accumulating in the soil during years of exposure. Further, excavation for the emplacement of the soldier piles would be deep enough that the total volume of soil would be nonhazardous since the uncontaminated subsurface soil would be most of the material excavated.

During the project design phase, the nature of project earthwork would be further evaluated, and a site-specific Aerially Deposited Lead Study would be completed if required. The purpose of the study would be to document lead concentrations in soil to ensure appropriate management of soils per the terms of the 2016 Aerially Deposited Lead Agreement between Caltrans and the California Department of Toxic Substances Control.

Standard Special Provisions for the management of potentially aerially deposited lead-contaminated soils would be included in the construction contract, including the development and implementation of a Lead Compliance Plan by the construction contractor.

Yellow Thermoplastic or Traffic Stripe

Traffic paint in the project limits must be assumed to contain elevated levels of lead, so residue from the removal of the existing traffic paint and thermoplastic within the project limits would have to be handled as hazardous waste. The appropriate Standard Special Provisions for the removal of traffic stripes and pavement markings would be determined during the project design phase once the removal method is known. Removal of traffic striping in the project limits would also require the development and implementation of a Lead Compliance Plan by the project contractor.

Wildland Fires

The Big Sur region is prone to high-severity wildland fires. The timber lagging component of the proposed retaining wall would be treated with fire-retardant paint rated to 350 degrees Fahrenheit, and barrier rails would use fire-resistant materials when possible. These design practices would reduce the risk of loss, injury, or death involving wildland fires as a result of the proposed structure.

Construction activities have the potential to unintentionally ignite nearby vegetation. However, the project would incorporate precautions to prevent fire-related incidents during construction as part of the code of safety

practices in accordance with the California Division of Occupational Safety and Health Fire Protection and Prevention Guidance.

Avoidance, Minimization, and/or Mitigation Measures

The potential for impacts generated by project construction would be reduced to less than significant under CEQA with the implementation of the following minimization measures.

HAZ 1: The project would include Caltrans Standard Specifications related to fire prevention and fire safety to minimize the potential for igniting nearby vegetation during construction activities, along with implementing the California Division of Occupational Safety and Health Fire Protection and Prevention Guidance.

HAZ 2: When handling and applying fire-retardant paint, the construction contractor must follow the manufacturer's safety protocols for workers and observe cleanup protocols in the event of an accidental spill.

2.1.10 Hydrology and Water Quality

The receiving water bodies for the proposed project are Mule Canyon and the Pacific Ocean, which are not impaired. The proposed project does not expect any long-term water quality impacts because the replacement retaining wall, barrier system, and drainage improvement aspects of the project would not alter the existing drainage pattern of the site. The project would involve earthwork related to retaining wall replacement that may lead to an increase in sediment-laden water, resulting in short-term water quality impacts. By incorporating appropriate engineering design and robust water Best Management Practices during construction, minimal short-term water quality impacts are expected. Additionally, the project contractor would prepare a site-specific Water Pollution Control Plan approved by Caltrans. Therefore, the project would not result in significant, long-term impacts on water quality. The project would not encroach into any 100-year base floodplain, and there would be no significant flooding risks associated with project implementation. The project would not constitute a significant floodplain encroachment, as defined in the Code of Federal Regulations, Title 23, Section 650.105(q).

Considering the information in the Air Quality, Noise, and Water Quality Technical Assessment Memorandum dated December 18, 2022, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality?	**No Impact**
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	**No Impact**
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation onsite or offsite;	**No Impact**
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	**No Impact**
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	**No Impact**
(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

Project activities would occur mostly on the existing Caltrans right-of-way and highway easements on State Route 1. Therefore, the project would not divide an established or planned community.

The project limits lie within the Coastal Zone. The project is not expected to conflict with or affect any existing Coastal Zone-related plans, policies, or regulations. Applicable California Coastal Act, Monterey County Local Coastal Plan, and Big Sur Coast Land Use Plan policies and consistency analyses are provided in Appendix B.

The project is not expected to conflict with any other existing land use plan, policy, or regulation in the region.

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

Project activities would involve work on highway features already located on the existing highway alignment on State Route 1. The project would have no involvement in the removal or extraction of mineral resources.

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

2.1.13 Noise

Considering the information in the Air Quality, Noise, and Water Quality Technical Assessment Memorandum dated December 18, 2022, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	**Less Than Significant Impact**
b) Generation of excessive groundborne vibration or groundborne noise levels?	**Less Than Significant 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 2 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**

Affected Environment

Within the project limits, State Route 1 crosses through areas zoned for rural, low-density residential development and scenic conservation by Monterey County. The closest private residence to the project limits is about 200 feet to the southwest and about 450 feet from the nearest structure on the Alila Ventana Big Sur Hotel property north of the project limits.

Environmental Consequences

Since no capacity would be added to the highway, and because the highway would not be realigned, local noise levels would be the same after project completion as they were before. Long-term noise abatement measures are not expected for this project.

Local noise levels in the vicinity of the project location would inevitably experience a short-term increase due to construction activities. The amount of construction noise would vary with the particular activities associated with retaining wall replacement, barrier system installation, and drainage system improvements. Construction noise is also dependent on the models and types of equipment used by the contractor. Caltrans' policy states that noise levels from construction equipment should not exceed 86 A-weighted decibels at 50 feet from the source.

Avoidance, Minimization, and/or Noise Abatement Measures

The potential for noise impacts generated by project construction would be minimized with the implementation of the following measures:

NOISE 1: Each internal combustion engine, used for any purpose on the job, or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the job site without an appropriate muffler.

NOISE 2: Notify the public in advance of the construction schedule when construction noise and upcoming construction activities likely to produce an adverse noise environment are expected. This notice shall be given two weeks in advance. Notice should be published in local news media of the dates and duration of the proposed construction activity. The District 5 Public Information Office posts notice of proposed construction and potential community impacts after receiving notice from the resident engineer.

NOISE 3: Shield especially loud pieces of stationary construction equipment.

NOISE 4: Locate portable generators, air compressors, etc., away from sensitive noise receptors.

NOISE 5: Limit grouping major pieces of equipment operating in one area to the greatest extent feasible.

NOISE 6: Place heavily trafficked areas such as the maintenance yard, equipment, tool, and other construction-oriented operations in locations that would be the least disruptive to surrounding sensitive noise receptors.

NOISE 7: Use newer equipment that is quieter and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators, intact and operational. Internal combustion engines used for any purpose on or related to the job shall be equipped with a muffler or baffle of a type recommended by the manufacturer.

NOISE 8: Consult District noise staff if complaints are received during the construction process.

The following Caltrans Standard Specification for noise control would also be implemented:

NOISE 9: To minimize impacts on residents' normal nighttime sleep activities, it is recommended that, whenever possible, construction work be done during the day. If nighttime construction is necessary, the noisiest construction activities would be done as early in the evening as possible. Caltrans Standard Specifications Section 14-8.02 Noise Control would be implemented. This standard specification requires the contractor to control and monitor noise resulting from work activities and not to exceed 86 A-weighted decibels maximum sound level at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

2.1.14 Population and Housing

The project would not change the capacity or alignment of State Route 1, so the project would not change the population or housing needs in the region.

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

Project activities would be limited to the existing alignment of State Route 1. The project would not be involved with any planned or existing governmental facilities and is not expected to affect any planned or existing governmental facilities close to the project. The project would maintain public access on State Route 1 during project construction, and access to any existing governmental facilities near the project sites would be maintained.

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

Question:	CEQA Significance Determinations for Public Services
e) Other public facilities?	**No Impact**

2.1.16 Recreation

Project activities would be limited to the existing alignment of State Route 1. The project would not have a considerable effect on existing recreational patterns in the region. The project would not be involved in the construction, removal, or alteration of access points or routes used for recreation. Also, the project would not create, expand, alter, or remove recreational facilities. Public access on State Route 1 would be maintained during project construction.

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 would not change the existing alignment or capacity of State Route 1 and would not change existing vehicle miles traveled on State Route 1. The project would not conflict with any existing or planned transportation-related programs or facilities in the region. 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 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?	**Less Than Significant Impact**

Affected Environment

The project is along State Route 1 in Monterey County at post mile 44.34. State Route 1 through the project limits is a north-south oriented, two-lane conventional highway with 12-foot lanes and shoulder widths varying from 1 to 4 feet. State Route 1 serves local and interregional traffic, including predominately recreational users, some local commuters, and limited commercial users. State Route 1 has a posted speed limit of 55 miles per hour through the project limits.

Environmental Consequences

The project would improve highway reliability by minimizing the potential for future rain events to compromise the stability of State Route 1 at post mile 44.34. There would be traffic delays for motorists and cyclists during construction due to temporary lane closures and one-way traffic control. The implementation of a Traffic Management Plan that includes changeable message signs, construction area signs, and a One-Way Reversible Lane Traffic Signal would minimize and manage any potential delays to highway users.

Emergency services would be notified of potential disruptions, delays, or detours in advance to minimize impacts to emergency access.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measure would further reduce the potential for impacts on transportation:

TRAFFIC-1: A Traffic Management Plan is required to address any potential traffic delays on State Route 1 that may occur during project construction due to temporary lane closures. This would ensure that coastal access via State Route 1 would be maintained at all times throughout the construction period and would account for emergency access while limiting delays.

2.1.18 Tribal Cultural Resources

Considering the information in the Cultural Resources Screened Undertaking Memorandum dated January 9, 2023, the significance determinations summarized below have been made. The Memorandum prepared for the project found that there are no archaeological or tribal cultural resources within the project's area of direct impact.

Despite the lack of evidence that there is any specific cultural sensitivity at this location or in the vicinity, the Salinan Tribe of San Luis Obispo and Monterey Counties has requested that construction for the project be monitored by a member of their tribe. This request for monitoring falls under a tribal consultation request and is not due to archaeological sensitivity.

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

2.1.19 Utilities and Service Systems

Based on currently available information and preliminary site investigations conducted by the project development team, 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 stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	**Less Than Significant Impact**

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

Affected Environment

Three utilities have been identified within the project limits:

- An overhead Pacific Gas and Electric Company electrical line south of the retaining wall that is not in conflict with the project and would remain in place.
- An overhead American Telephone and Telegraph (AT&T) telecommunication line that runs parallel to State Route 1 that is not in conflict with the project and would remain in place.
- A private waterline belonging to Coastlands Mutual Water Company is located along the west side of the failed retaining wall.

Environmental Consequences

Removal and replacement of the failed retaining wall would require removal and replacement of an existing drainage system also located at post mile 44.34. The project would not install new culvert structures at new locations or relocate any existing culvert alignments. Additionally, the project would not change existing wastewater treatment or drainage patterns in the region. The project would not change the existing functions of electrical, natural gas, or telecommunications facilities in the region. The existing private waterline located along the west side of the failed wall would be relocated by the owner

of the nearby property in a manner consistent with all state and federal requirements.

The project would not generate excessive amounts of solid waste that would overwhelm the capacities of existing waste management facilities. Waste materials generated by project construction would be collected and disposed of properly to meet all state and federal requirements.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures related to utilities and service systems are proposed.

2.1.20 Wildfire

The California Department of Forestry and Fire Protection provides a Fire Hazard Severity Zone mapping tool that helps in assessing the project location's vulnerability to future wildfire events. The fire hazard severity zones are developed using a science-based and field-tested model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior. Many factors are considered, such as vegetation, topography, climate, crown fire potential, ember production and movement, and the fire history of the area. There are three levels of hazard used in this mapping tool: moderate, high, and very high. The post mile location of the proposed project is in an area of "very high" fire hazard severity. These risk levels are expected to increase under future climatic conditions.

Considering this information, along with the information in the Climate Change Technical Report dated February 8, 2023, 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**

Question—Would the project:	CEQA Significance Determinations for Wildfire
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	**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 Impact**
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	**Less Than Significant Impact**
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	**Less Than Significant Impact**

Affected Environment

Project work would occur along State Route 1 in Monterey County at post mile 44.34. State Route 1 through the project limits is a north-south oriented, two-lane conventional highway with 12-foot lanes and shoulder widths varying from 1 to 4 feet.

The project location is next to low-density rural residential development, and the Pacific Ocean can be seen from the project site.

The biological environment of the area is predominantly composed of coast live oak woodlands, with a minor ruderal/disturbed component within the project area, as explained in Section 2.1.4 Biological Resources. As explained in Section 2.1.5 Cultural Resources and Section 2.1.18 Tribal Cultural Resources, project work would occur outside of culturally significant areas. As explained in Section 2.1.7, Geology and Soils, paleontological resources would not be impacted by the project.

Environmental Consequences

In response to checklist item a) above, the project was evaluated for potential impacts on biological resources, as explained in Section 2.1.4 Biological Resources. Two land cover types and vegetation communities occur in the Biological Study Area: ruderal/disturbed and coast live oak woodland. While the project may affect the California red-legged frog and its critical habitat, the impact is considered less than significant with the implementation of the avoidance and minimization measures outlined in Section 2.1.4 Biological Resources. The project would not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal.

In addition, the project was evaluated for potential impacts on cultural resources, tribal cultural resources, and paleontological resources in Section 2.1.5 Cultural Resources, Section 2.1.18 Tribal Cultural Resources, and Section 2.1.7 Geology and Soils. It was determined that the project would have no impact on cultural or paleontological resources and, therefore, would not eliminate important examples of the major periods of California history or prehistory.

In response to item b) above, the project was evaluated for potential cumulative impacts on the California red-legged frog and the State Route 1 viewshed in the project's Cumulative Impact Report. The Cumulative Impact Report follows the eight-step process for evaluating potential cumulative impacts. As part of this process, a resource study area was defined for each of the resources. The current health of the two resources was evaluated, and the current and reasonably foreseeable projects that could contribute to impacts on the biological resources were considered. It was determined that,

although the project would contribute to an existing adverse cumulative impact, the project's contribution would not be cumulatively considerable. Implementation of all avoidance and minimization measures outlined in Section 2.1.1 Aesthetics and Section 2.1.4 Biological Resources would help to ensure the project's impact is less than significant and not cumulatively considerable.

In response to item c) above, the project intends to replace the failed Coastlands II Retaining Wall and add barrier systems for traveler safety on State Route 1.

Completion of the project would help maintain a quality transportation corridor for use by the public and minimize the potential for future rain events to compromise the stability of State Route 1. The project provides avoidance and minimization measures for aesthetics and standard specifications for hazardous waste and noise. No significant impacts would result on the human environment.

The project would include Caltrans standard measures for hazardous waste testing and monitoring to protect the general public from hazards that could arise from the project's construction activities. The project would not generate hazards, or expose the general public to hazards, that could result in substantial adverse effects. Therefore, the project would not result in considerable impacts on the general public due to hazardous waste.

The project includes avoidance and minimization measures to reduce the impact it may have on the aesthetic environment. The proposed wall, bridge rails, and barrier system included in the project are seen elsewhere along the Big Sur Coast and are not, by themselves, inconsistent with the rural roadway character of the region or throughout the state. As a result, the proposed project elements would be secondary to the overall experience of traveling along the rugged and rural coast highway.

Construction would also require the removal of vegetation in some areas. With revegetation and implementation of measures listed in Section 2.1.1 Aesthetics to minimize the noticeability of new highway features, the project would marginally affect scenic vistas in the area and would be consistent with the aesthetic and visual protection goals for State Route 1. Therefore, these visual changes would cause a minor reduction of visual quality in the immediate project area.

Finally, the project would inevitably generate noise during the construction process. The increase in noise levels as a result of construction activities would not be substantial because construction activities would be temporary and intermittent. In addition, the project includes Caltrans Standard Specifications for noise control to minimize potential noise-related disturbances caused by construction activities.

Avoidance, Minimization, and/or Mitigation Measures

A complete list of standard specifications and avoidance, minimization, and/or mitigation measures for the project can be found in Section 1.6 Standard Measures and Best Management Practices Included in All Build Alternatives, Section 2.1 CEQA Environmental Checklist, and Appendix C Avoidance, Minimization and/or Mitigation Measures Summary.

Appendix A Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

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

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TONY TAVARES
Director

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

Appendix B Coastal Policy Analysis

The project is within the coastal zone and could potentially affect resources protected by the Coastal Zone Management Act of 1972. The Coastal Zone Management Act is the main federal law enacted to preserve and protect coastal resources. The Coastal Zone Management Act set 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; and 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 resources; 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 Big Sur Coast Land Use Plan, one of four Coastal Land Use Plan documents for Monterey County. These land use plan documents, combined with the Coastal Implementation Plan, make up the Monterey County Local Coastal Program. The proposed project is within the Big Sur Coast Land Use Planning Area, which was adopted and certified in 1988 and was last updated in 2010. Local coastal programs contain the ground rules for the development and protection of coastal resources in their jurisdiction consistent with the California Coastal Act goals. The Big Sur Coast Land Use Plan contains goals, objectives, and policies to protect the coastal resources in the Big Sur Planning Area. The Big Sur Coastal Implementation Plan is its companion document that establishes regulations for development (i.e., development standards) within the Big Sur Coast Land Use Plan area.

In Monterey County, a Coastal Development Permit would be required for the project to ensure compliance with the county's Local Coastal Program and the California Coastal Act. A Federal Consistency Certification would also be needed from the California Coastal Commission to ensure compliance with the Coastal Zone Management Act. The Coastal Development Permit process would start near the final design stage of the project. The Federal Consistency Certification process would start before the completion of

the final environmental document and would be completed to the maximum extent possible during the NEPA process.

The Big Sur Coast Highway Management Plan was prepared for the State Route 1 corridor along the Big Sur Coast by Caltrans, with guidance from a 19-member steering committee and participation by other stakeholders who shared a vision for the corridor and came together to evaluate problems and craft solutions. Together, they committed to creating a management framework for the continued safe and efficient operation of State Route 1 in a manner that preserves, protects, and restores the scenic, natural, and cultural character and qualities of the highway corridor. The Big Sur Coast Highway Management Plan consists of a Corridor Management Plan and a series of management guidelines. The Corridor Management Plan summarizes the inventory of corridor resources and qualities, describes the issues and challenges investigated by the five working groups, an action plan for addressing the issues and a framework for implementation. The three guidelines address:

- Corridor Aesthetics
- Landslide Management and Storm Damage Response
- Vegetation Management.

For the proposed project, the Big Sur Coast Highway Management Plan Guidelines on Corridor Aesthetics would apply.

The following is a list of the relevant policies and development standards from the California Coastal Act, the County of Monterey's Big Sur Coast Land Use Plan and Big Sur Coastal Implementation Plan, and the Big Sur Coast Highway Management Plan—Guidelines for Corridor Aesthetics. The relevant policies or development standards from each have been grouped together by subject, and an analysis of the proposed project's consistency with each is provided below. Policies for resources that would not be affected by the project have not been included.

Visual and Scenic Resources

Relevant Policies

California Coastal Act:

Section 30251 - Scenic and Visual Qualities

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually

compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas, such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by the local government, shall be secondary to the character of its setting.

Big Sur Coast Land Use Plan:

3.2 Scenic Resources

3.2.1 Key Policy

Recognizing the Big Sur Coast's outstanding beauty and its great benefit to the people of the state and nation, it is the county's objective to preserve these scenic resources in perpetuity and to promote the restoration of the natural beauty of visually degraded areas wherever possible. To this end, it is the county's policy to prohibit all future public or private development visible from State Route 1 and major public viewing areas (the critical viewshed) and to condition all new development in areas not visible from State Route 1 or major public viewing areas on the siting and design criteria set forth in Sections 3.2.3, 3.2.4, and 3.2.5 of this plan. This applies to all structures, the construction of public and private roads, utilities, lighting, grading, and removal or extraction of natural materials.

3.2.3 Critical Viewshed

4. New roads, grading, or excavations will not be allowed to damage or intrude upon the critical viewshed. Such road construction or other work shall not start until the entire project has completed the permit and appeal process. Grading or excavation shall include all alterations of natural landforms by earthmoving equipment. These restrictions shall not be interpreted as prohibiting the restoration of severely eroded water course channels or gullying, provided a plan is submitted and approved before starting work.

5. Where it is determined that a proposed development cannot be resited, redesigned, or in any other way made to conform to the basic critical viewshed policy, then the site shall be considered environmentally inappropriate for development.

7. The general policy concerning the replacement of structures shall be to encourage resiting or redesign to conform to the Key Policy. Replacement or enlargement of existing structures or structures lost in a fire or natural disaster within the critical viewshed shall be permitted on the original location on the site, provided no other less visible portion of the site is acceptable to the property owner and provided the replacement or enlargement does not increase the visibility of the structure. Replacement or enlargement of structures outside the critical viewshed shall be permitted as long as such

replacement or enlargement does not cause the structure to intrude into the critical viewshed.

3.2.5 Exceptions to the Key Policy

C. State Route 1 Facilities

1. Public Highway Facilities

Road capacity, safety, and aesthetic improvements shall be allowed, as set forth below, provided they are consistent with Sections 4.1.1, 4.1.2, and 4.1.3 of this plan. Signs, guardrails, and restrooms shall be of a design complementary to the rural setting and character of Big Sur, with a preference for natural materials. Protective barriers constructed by Caltrans should use boulders or walls of rock construction. Public agency permanent highway signs should be framed with unpainted redwood. All highway signs should be reviewed once every three years by Caltrans to determine the need for their continued use. All unnecessary signs should be removed.

Section 4. State Route 1 and County Roads

4.1.1 Key Policy

Monterey County will take a strong and active role in guiding the use and improvement of State Route 1 and land use development dependent on the highway. The county's objective is to maintain and enhance the highway's aesthetic beauty and to protect its main function as a recreational route. The highway shall remain a two-lane road and shall include walking and bicycle trails wherever feasible. To protect and enhance public recreational enjoyment of Big Sur's unique natural and scenic resources, recreational traffic should be regulated during congested peak use periods.

4.1.2 General Policies

2. A principal objective of management, maintenance, and construction activities within the State Route 1 right-of-way shall be to maintain the highest possible standard of visual beauty and interest.

4.1.3 Specific Policies

A. Road and Capacity Improvements

1. The county requests that, to maximize vehicular access to the Big Sur Coast, the width of State Route 1 be upgraded to a standard of 12-foot lanes and 2-to-4-foot shoulders where physically practical and consistent with the preservation of other coastal resources values. A program of constructing left-turn lanes and other improvements shall be undertaken to improve traffic capacity and safety.

B. Aesthetic Improvements

4. The county requests that an overall design theme for the construction and appearance of improvements within the State Route 1 right-of-way be developed by Caltrans in cooperation with the California Department of Parks and Recreation, the U.S. Forest Service, and local citizens. Design criteria shall apply to roadway signs, fences, rails, access area improvements, bridges, restrooms, trash receptacles, etc. The objective of such criteria shall be to ensure that all improvements are unnoticeable and are in harmony with the rustic natural setting of the Big Sur Coast. The special report by local citizens entitled "Design Standards for the Big Sur Highway" on file at the Monterey County Planning Department should serve as a guide and point of departure for Caltrans and other public agencies in developing a design theme for State Route 1 and in making improvements within the state right-of-way.

Big Sur Coastal Implementation Plan:

20.145.030 Visual Resources Development Standards

A. Development Within the Critical Viewshed

1. Critical Viewshed Determination

b. Development shall be considered to be within the critical viewshed if any portion of the proposed development is visible from State Route 1, including pullouts, rights-of-way, and walkways at the highway's edge, or the major public viewing areas identified in the "critical viewshed" definition, as contained in Section 20.145.020.V. Visibility will be considered in terms of normal, unaided vision in any direction for any amount of time at any season. As well, visibility shall be considered in terms of what portions of the development would be visible under the existing conditions, regardless of landscaping or other techniques which could be later used to screen the development. As such, development shall be considered to be within the critical viewshed if it would be visible from State Route 1 or major public viewing areas given existing conditions. The critical viewshed does not include areas visible from the hiking trails shown on the Trails Plan contained in the Big Sur Coast Land Use Plan.

Ocean views from State Route 1 shall not be obscured by artificial berming, mounding, or landscaping. Distant development, although technically within the line of sight from State Route 1 or other major public viewing areas, shall not be considered to be within the critical viewshed if it has been designed and sited so as not to be seen from State Route 1 or other major public viewing areas as defined in Section 20.145.020.V. Exterior light sources shall be prohibited if such light sources would be directly visible from State Route 1 or other major public viewing areas as defined in Section 20.145.020.V.

All new development not in conformance with the approved representations shall be removed (Reference Policy 3.2.3.B.1).

2. Development Standards

e. Development of new roads, improvement to an existing road requiring more than 100 cubic yards of grading, or development of grading or excavations which require a coastal development permit, including all alterations of natural landforms by earth-moving equipment, will not be allowed to damage or intrude upon the critical viewshed. Such road construction or other work shall not start until the entire project has completed the permit and appeal processes. These restrictions shall not be interpreted as prohibiting the restoration of severely eroded watercourse channels or gullying, provided a plan is submitted and approved before starting work (Reference Policy 3.2.3.A.4).

f. When a structure is to be replaced, resiting or redesign should be required, as necessary, to better conform with the intent of this section. Replacement or enlargement of existing structures, or structures lost in a fire or natural disaster within the critical viewshed shall be permitted on the original location on the site, provided no other less visible portion of the site is acceptable to the property owner, and provided the replacement or enlargement does not increase the visibility of the structure. Replacement or enlargement of structures outside the critical viewshed shall be permitted as long as such replacement or enlargement does not cause the structure to intrude into the critical viewshed (Reference Policy 3.2.3.A.7)

B. Exceptions for Development in Critical Viewshed

3. State Route 1 Facilities

a. Public Highway Facilities

Road capacity, safety, and aesthetic improvements shall be allowed, as set forth below, provided they are consistent with Section 20.145.130 of this chapter.

Signs, guardrails, and restrooms shall be of a design complementary to the rural setting and character of Big Sur, with a preference for natural materials or natural-appearing materials, where feasible. Protective barriers constructed by Caltrans should use boulders or walls of rock construction. Public agency permanent highway signs should be framed with unpainted redwood. The design of all structures shall be subject to the approval of the planning director as a condition of project approval, subject to consultation with Caltrans. Caltrans shall consider any recommendations by the planning director concerning signing and structure design. While an application for a public highway improvement is incomplete, Caltrans shall review all highway signs within the area encompassed by the project to determine the need for

each sign's continued use. The information on each sign, including location, type, and necessity, shall be submitted to the planning department before the application can be considered complete. As a condition of project approval, the signs determined to be unnecessary shall be removed before the issuance of building or grading permits (Reference Policy 3.2.5.C.1).

Big Sur Coast Highway Management Plan—Guidelines for Corridor Aesthetics:

Section 3.2 Roadway Elements

Pavements

1. Paved surfaces should retain relative continuity of pavement color (i.e., dark gray/black asphalt concrete). Any new materials used for paving should match the existing pavement for basic color and reflectivity to the extent practical.

Travel Lanes and Shoulders- 1, 2, 3, 5

1. Support the concept for consistent 12-foot travel lanes and 4-foot paved shoulders, consistent with the Transportation Concept Report for the Big Sur Coast portion of State Route 1, and strive for continuity in paved shoulder widths to the extent practicable. In supporting this concept, acknowledge the need for case-by-case review for safety and environmental impacts and require approval of a design exception to allow a combined roadbed width of less than 40 feet.

5. Material for shoulder backing necessary to maintain a smooth transition from the paved to the unpaved surface at the edge of the pavement should be visually compatible with the site. Imported materials should be selected to match the site to the extent possible.

3.3 New Construction and Rehabilitation

Sidehill Structures and Retaining Systems

2. Newly constructed retaining walls, guardrails, sidehill structures, or any other highway safety features should be designed for visual compatibility with the rural character; the use of natural-appearing materials, such as stone and timber, should be considered where appropriate to the local setting.

3. New structures should be non-replicative. In keeping with the U.S. Secretary of the Interior's preservation principles, new retaining walls, parapet walls, or culvert headwalls should be visually distinguishable from those that make up the historic district.

4. New retaining walls visible from the highway or other public viewing areas should be designed and constructed for visual compatibility with the rural character. The use of natural-appearing materials, such as stone and timber, will be preferred when appropriate to the local setting.

5. Evaluate visible sidehill structures that appear incompatible with the setting and consider the potential for the application of aesthetic treatments for blending better into the landscape.

Drainage Facilities

3. In cases where headwalls, inlet/outlet features, overside drains, or downdrains are visible from the highway, the selection of type and materials must be visually compatible to the highest degree reasonable. Visible galvanized metal elements (highly reflective, giving a shiny appearance) should be avoided by choosing alternative materials or treating them to reduce reflectivity.

3.4 Guardrail, Bridge Rail, Rock Walls, and Fences

Bridge Rail and Guardrail

2. Newly constructed guardrails or any other roadside safety features should be designed for visual compatibility with the rural character. Natural-appearing materials, such as stone and timber, are preferred where they are appropriate to the local setting. Metal beam guardrail is commonly used along State Route 1 and is visually acceptable in most situations. Wood rather than steel elements are generally more consistent with the overall rustic character. Further options should be considered for the application of alternative guardrail designs that are more compatible with the rural character. New guardrails should incorporate natural or natural-appearing materials such as stone, timber, or textured and stained concrete. Where steel elements are required based on other considerations, treatments that limit the overall visibility and effect of galvanized steel elements should be integrated to the maximum extent practicable. Treatments include minimizing the overall profile of the feature and etching or painting the steel elements.

4. Where new locations for guardrails are identified, alternative guardrail types should be considered for installation that may be more visually compatible with the rural and historic context of the corridor. Specifically, applications of the following rail types should be considered in the corridor (Figure 20).

- Steel-backed timber guardrail (a timber rail backed with steel plate): compatible with the forested character typical of the Big Sur Valley and Carmel Highlands

- Stone masonry guardrail: a constructed image that may be more appropriate to areas of settlement and to special locations such as vista points and scenic pullouts

- Textured and stained or colored concrete guardrail

5. Finish treatments that call special attention to guardrails are not recommended. Treatments that tone down the reflectivity of standard galvanized metal are preferred.

6. End treatments for guardrails and bridge rails are also important visual elements. Where possible, barriers should be terminated with buried end sections, such as a nearby slope or an earthen berm. The height of berms used for buried end sections must not exceed the height of the rail. Alternative end treatments, such as barrels or crash cushions, should be avoided unless site-specific conditions require them.

Landscaping

1. For existing trees along the State Route 1 corridor:

- Stands of native (indigenous) trees along State Route 1 should be protected and preserved where their presence is consistent with highway safety and operational needs.

- Restoration of native stands of trees should be encouraged where they may have been impacted by highway development, where such restoration can be accomplished consistent with highway safety and operational needs.

- Introduced (non-indigenous) trees along State Route 1 should be managed according to the cultural value they may provide; for example, trees associated with areas of human settlement may provide cultural value; where no such association is made, removal of non-native trees should be considered.

- Diseased trees should be removed in accordance with vegetation management best practices to avoid the spread of disease.

- When and where appropriate, the removal of trees greater than 4 inches in diameter at breast height should be offset with native vegetation.

2. For planting new trees along the State Route 1 corridor:

- Trees may be a component of habitat restoration or proposed to mitigate for or enhance an existing use (such as screening or providing shade).

- Planting non-native trees is discouraged.

- Generally, trees should not be planted on the oceanside of State Route 1, where they could interfere with open views.

- Genotype and precise source of plant material should be considered, and the use of locally propagated stock is encouraged.

Consistency Analysis

As discussed in greater detail in Section 2.1.1, Aesthetics, there is a potential for visual impacts to occur as a result of the project due to the introduction of built elements and removal of roadside vegetation. The overall effect of these changes would be a slightly more engineered-looking highway facility in the immediate area. This character change, however, would be minor and secondary to the surrounding high-quality viewshed.

The project proposes a “see-through-type” bridge rail atop the retaining wall itself, which would be darkened to visually recede and appear more consistent with the natural, wooded character of the Big Sur setting. The same type of bridge rail has also been used at the Coastlands retaining wall located about 0.1 mile north of this location. The project is also proposing to close the gap on the southbound shoulder between the Coastlands wall and the Coastlands II wall with either an ST-75B Barrier Rail or the Midwest Guardrail System. The highway environment in the immediate project vicinity would be somewhat altered by the introduction of barrier rails. However, it would not substantially degrade the existing visual quality or character of public views regardless of what alternative is selected. Furthermore, the project would include aesthetic treatment of visible metal drainage structures, bridge rails, concrete barrier slabs, the posts and beams of all new or replaced guardrails, barrier rail and approach rail, vertical pile wall, and any concrete lagging. Efforts would be made to minimize visual intrusion upon the natural landscape. The new soldier pile wall would be non-replicative, meaning it would be visually distinguishable from any that make up the historic district. Trash generated during the construction process would be contained and removed from the project site.

The project would not alter existing lanes or shoulder widths, and any shoulder backing would be visually compatible. Consistency in pavement color and striping would be considered during construction, and the area would be graded and contoured upon completion of construction.

To access the project site, a total of eight trees under 15 inches in diameter at breast height must be removed: five Monterey cypresses (diameter at breast height of 4 inches, 7.75 inches, 10 inches, 13 inches, and 13.5 inches), one California buckeye (diameter at breast height of 10 inches), and two coast live oaks (diameter at breast height of 5 inches and 9 inches). One Monterey cypress and one coast live oak planned for removal have a diameter at breast height of less than 6 inches. However, Environmentally Sensitive Area

fencing would be placed to protect trees and other plants which are to remain. After construction, the project site would be revegetated with an assemblage of native vegetation suitable for the area. Revegetation would include native trees planted in onsite locations that would minimize interference with ocean views when fully mature to the greatest extent possible. An appropriate vegetation control area would be maintained. After the site is revegetated, the completed project would be largely unnoticed by highway travelers. It has been determined that with the implementation of the avoidance, minimization, and/or mitigation measures listed in Section 2.1.1, the potential visual impacts of this project can be reduced and would not result in substantial adverse impacts on the existing visual environment. Therefore, the project would be consistent with these policies.

Historical Resources

Relevant Policies

Big Sur Coast Land Use Plan:

Section 3.10 Historical Resources

3.10.1 Key Policy

It is the policy of the county to protect, maintain, and, where feasible, enhance and restore the cultural heritage of the county and its human-made resources and traditions.

Section 3.10.2 General Policies

2. The county shall provide for the mitigation of site and artifact disturbance in county-approved projects through the careful surveying of project sites and the consideration of project alternatives to preserve significant cultural resources.

Consistency Analysis

The project would have no impact on cultural or historic resources because no cultural or historic resources are known to exist within or next to the project limits. The failed existing retaining wall was constructed in 2003 and is not historic. In addition, the culvert within the project limits does not contain a historic headwall and is not a contributor to a historic district. Therefore, the project would be consistent with these policies.

Archaeological and Paleontological Resources

Relevant Policies

California Coastal Act:

Section 30244 - Archaeological or Paleontological Resources

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Big Sur Coast Land Use Plan:

Section 3.11 Archaeological Resources

3.11.1 Key Policy

Big Sur's archaeological resources, including those areas considered to be archaeologically sensitive but not yet surveyed and mapped, shall be maintained and protected for their scientific and cultural heritage values. New land uses and development, both public and private, should be considered compatible with this objective only where they incorporate all site planning and design features necessary to avoid or mitigate impacts on archaeological resources.

3.11.2 General Policies

2. When developments are proposed for parcels where paleontological resources or archaeological or other cultural sites are located, project design that avoids or substantially minimizes impacts to such cultural sites shall be required. To this end, emphasis should be placed on preserving the entire site rather than on the excavation of the resource, particularly where the site has potential religious significance.

4. Whenever development is to occur in areas having a probability of containing archaeological sites, the Site Survey Office or a professional archaeologist shall be contacted to determine whether the property has received an archaeological survey. If not, such a survey shall be conducted to determine if an archaeological site exists.

Consistency Analysis

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

While archaeological and paleontological resources are not expected 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. Furthermore, though the project site is not archeologically sensitive, the Salinan Tribe of San Luis Obispo and Monterey Counties have requested that construction for the project be monitored by a member of their tribe. Therefore, the project would be consistent with these policies.

Coastal Hazards

Relevant Policies

California Coastal Act:

Section 30253 - Minimization of adverse impacts

New development shall do all of the following:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazards.

(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Big Sur Coast Land Use Plan:

Section 3.7 Hazardous Areas

3.7.1 Key Policy

Land use and development shall be carefully regulated through the best available planning practices to minimize risk to life and property and damage to the natural environment.

3.7.2 General Policies

3. All development shall be sited and designed to minimize risk from geologic, flood, or fire hazards to a level generally acceptable to the community. Areas of a parcel that are subject to high hazard(s) shall generally be considered unsuitable for development. For any development proposed in high-hazard areas, an environmental or geotechnical report shall be required before county review of the project.

3.7.3 Specific Policies

A. Geologic Hazards

1. All development shall be sited and designed to conform to site topography and to minimize grading and other site preparation activities. Applications for grading, building permits, and subdivisions shall be reviewed for potential impacts to onsite and offsite development arising from geologic and seismic hazards and erosion. Mitigation measures shall be required as necessary.

4. Critical facilities, such as major transportation links, communications and utility lines, and emergency shelter facilities, shall be located, designed, and

operated in a manner that maximizes their ability to remain functional after a major earthquake.

7. All structures should be designed and constructed to: a) resist minor earthquakes with epicenters on the closest potentially active fault without damage; b) resist moderate earthquakes without structural damage, but with some nonstructural damage allowable; c) resist a major earthquake of the intensity or severity of the strongest experienced in California without collapse, but with some structural as well as nonstructural damage allowable.

8. Structures and roads in areas subject to landslides are prohibited; a certified engineering geology report indicates mitigations exist to minimize risk to life and property. Mitigation measures shall not include massive grading or excavation or the construction of protective devices that would substantially alter natural landforms.

9. Any proposed development within 50 feet of the face of a cliff or bluff or within the area of a 20-degree angle from the toe of a cliff, whichever is greater, shall require the preparation of a geologic report before consideration of the proposed project. The report shall demonstrate that (a) the area is stable for development; and (b) the development will not create a geologic hazard or diminish the stability of the area.

Consistency Analysis

Geologic testing and a geologic report would be prepared to ensure the structural stability of the project. Therefore, the project would be consistent with these policies.

Water Quality

Relevant Policies

California Coastal Act:

Section 30231 - Biological Productivity; Water Quality

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained; and, where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Big Sur Coast Land Use Plan

Section 3. Resource Management

3.4 Water Resources

3.4.1 Key Policy

The protection and maintenance of Big Sur's water resources is a basic prerequisite to the protection of all other natural systems. Therefore, water resources will be considered carefully in all planning decisions and approvals. In particular, the county shall ensure that adequate water is retained in the stream system to provide for the maintenance of the natural community of fish, wildlife, and vegetation during the driest expected year.

Consistency Analysis

The proposed project would not have any long-term water quality impacts. Replacement of the retaining wall, the new barrier system, and drainage improvements would not alter the existing drainage pattern of the site. The project would have no impact on riparian areas. The project would involve earthwork related to retaining wall replacement that may lead to an increase in sediment-laden water, resulting in short-term water quality impacts. However, by incorporating appropriate engineering design and robust water Best Management Practices during construction, the short-term impacts on water quality would be minimized to the maximum extent feasible. Additionally, a site-specific Water Pollution Control Plan would be implemented during project construction. Therefore, the project would be consistent with these policies.

Environmentally Sensitive Habitat Areas

Relevant Policies

California Coastal Act:

Section 30240 Environmentally Sensitive Habitat Areas; Adjacent Developments

(a) Environmentally Sensitive Habitat Areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas next to Environmentally Sensitive Habitat Areas and parks and recreation areas shall be sited and designed to prevent impacts that would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas.

Big Sur Coast Land Use Plan:

Section 3.3 Environmentally Sensitive Habitats

3.3.1 Key Policy

All practical efforts shall be made to maintain, restore, and, if possible, enhance Big Sur's Environmentally Sensitive Habitats. The development of all categories of land use—both public and private—should be secondary to the protection of these critical areas.

3.3.2 General Policies

1. Development, including vegetation removal, excavation, grading, filling, and the construction of roads and structures, shall not be permitted in Environmentally Sensitive Habitat Areas if it results in any potential disruption of habitat value. To approve development within any of these habitats, the county must find that disruption of a habitat caused by the development is not significant.

9. The county shall require the use of appropriate native species in proposed landscaping.

Big Sur Coastal Implementation Plan:

Section 20.145.040 Environmentally Sensitive Habitat Development Standards

B. General Development Standards

All development, including vegetation removal, excavation, grading, filling, and the construction of roads and structures, shall be prohibited in Environmentally Sensitive Habitat Areas if it has been determined through the biological survey prepared for the project that the development's impact cannot be reduced to a level at which the long-term maintenance of the habitat is assured, (i.e., to an insignificant level). To approve any development within an Environmentally Sensitive Habitat Area, the decision-making body must find that the disruption of such habitat caused by the development would not be significant (Reference Policy 3.3.2.1).

4. Development on parcels containing or within 100 feet of Environmentally Sensitive Habitats, as identified on the current Big Sur Coast Environmentally Sensitive Habitat resource map, other resource information, or planner's onsite investigation, shall not be permitted to adversely impact the habitat's long-term maintenance, as determined through the biological survey prepared for the project. Proposals shall be modified for siting, location, bulk, size, design, grading, vegetation removal, and/or other methods where such modifications will reduce impacts to an insignificant level and assure the

habitat's long-term maintenance. Also, the recommended mitigation measures of the biological survey will be considered and made conditions of project approval (Reference Policy 3.3.2.4, Policy 3.3.2.7).

Consistency Analysis

The proposed project would not have a significant impact on biological resources and is not located in or next to designated Environmentally Sensitive Habitat Areas. Avoidance and minimization measures would be implemented to minimize the effects of the project on plant and animal species within the project limits.

No federally or state-listed plant species were identified as having the potential to occur in the project area, and none were found during surveys. The Biological Study Area is located within the designated critical habitat for California red-legged frog and also has the potential to support Smith's blue butterfly.

Smith's blue butterfly (a federally endangered species) uses seacliff buckwheat and seaside buckwheat as host plants for all life stages. Surveys indicated that buckwheat is not present within the Biological Study Area, and as such, Smith's blue butterfly is not expected to occur in the project area. Furthermore, the project's Biological Study Area is located entirely within the federally designated California red-legged frog Critical Habitat Unit Monterey County 3, "Big Sur Coast." However, the habitat within the Biological Study Area is unlikely to support California red-legged frogs. The Federal Endangered Species Act Section 7 Effects Determination concludes that the project "may affect, likely to adversely affect California red-legged frog." The Biological Study Area is close to a known breeding pond for the species; however, avoidance and minimization measures listed in Section 2.1.4 of this document and Natural Environment Study (Minimal Impacts) would ensure that impacts on the species are minimized. With the implementation of these measures, the project would be consistent with these policies.

Tree Protection Policies

Relevant Policies

Big Sur Coast Land Use Plan:

Section 3.5. Forest Resources

3.5.2 General Policies

2. All cutting or removal of trees shall be in keeping with the broad resource protection objectives of this plan.

Specific policies, criteria, and standards of other sections of this plan shall govern both commercial and noncommercial tree removal.

8. In addition to compliance with forestry and soil resources policies, all developments, forest management activities, and tree removal shall specifically conform to this plan's policies regarding water and marine resources, sensitive habitat areas, and coastal visual resources.

Section 5.4 Development Policies

5.4.2 General Policies

13. A coastal development permit must be obtained for the removal of trees and other major vegetation. However, in the Big Sur Coast area, the following will not be considered as removal of major vegetation:

a. Removal of non-native or planted trees, except where this would result in the exposure of structures in the critical viewshed;

b. Removal of hazardous trees which pose an imminent danger to life or property or threaten contagion of nearby forested areas, subject to verification by the county or California Department of Forestry and Fire Protection;

c. Thinning of small (less than 12 inches in diameter) or dead trees from density forested areas, especially as needed to reduce unsafe fuel accumulations next to existing occupied buildings; and

d. Prescribed burning, crushing, lopping, or other methods of brush clearing which do not materially disturb underlying soils.

Selective removal of trees may be permitted where consistent with the forest resources policies of this Plan, provided that no impairment of the critical viewshed or degradation of Environmentally Sensitive Habitat will result. Where the removal of trees is part of a stand improvement project or similar long-term management effort, the submission of a Forest Management Plan for the site will be encouraged by the county; approval of such a plan pursuant to a coastal development permit will remove the need for multiple permit requests on the same site.

Big Sur Coastal Implementation Plan:

Section 24.145.060 Forest Resources Development Standards

D. Development Standards

2. Removal of any trees which would result in the exposure of structures in the critical viewshed shall not be permitted, subject to the provisions of Section 20.145.030.A. A condition of project approval shall be that the

applicant grants a scenic easement to the county over existing vegetated areas without which the approved development would be located in the critical viewshed. The easement shall be required in accordance with the provisions of Section 20.142.130.

3. Removal of native trees shall be limited to that which is necessary for the proposed development and/or justified in the Forest Management Plan as being necessary to improve unhealthy forest conditions. The proposed development shall be modified for siting, location, size, bulk, and/or design where such modifications will result in less removal of healthy trees in a healthy forest condition or as otherwise meeting the objectives of the Forest Management Plan.

4. Removal of native trees other than those directly necessary for the proposed development shall be limited to that required for the overall health and long-term maintenance of the forest, as verified in the Forest Management Plan.

Consistency Analysis

To access the project site, a total of eight trees under 15 inches in diameter at breast height must be removed: five Monterey cypresses (diameter at breast height of 4 inches, 7.75 inches, 10 inches, 13 inches, and 13.5 inches), one California buckeye (diameter at breast height of 10 inches), and two coast live oaks (diameter at breast height of 5 inches and 9 inches). One Monterey cypress and one coast live oak planned for removal have a diameter at breast height of less than 6 inches. Environmentally Sensitive Area fencing would be placed to protect trees and other plants that are not slated for removal. After construction, the project site would be revegetated with an assemblage of native vegetation suitable for the area. Native trees would be replanted at a 1-to-1 ratio unless it is determined that the replacement ratio would result in overcrowding. To the extent feasible, onsite replanting locations would be sited to attempt to minimize interference with ocean views from State Route 1 when trees are fully grown. Therefore, the project would be consistent with these policies.

Public Access

Relevant Policies

California Coastal Act, Chapter 3:

Section 30211 - Development Not To Interfere With Access

Development shall not interfere with the public's right of access to the sea, where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30252 -Maintenance and Enhancement of Public Access

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

Big Sur Coast Land Use Plan:

Section 4. State Route 1 and County Roads

4.1.2 General Policies

1. Improvements to State Route 1 shall be undertaken to increase its service capacity and safety, consistent with its retention as a scenic two-lane road.

4.1.3 Specific Policies

A. Road Capacity and Safety Improvements

1. The county requests that, to maximize vehicular access to the Big Sur Coast, the width of State Route 1 be upgraded to standard 12-foot lanes and 2-to-4-foot shoulders where physically practical and consistent with the preservation of other coastal resource values. A program of constructing left-turn lanes and other improvements shall be undertaken to improve traffic capacity and safety.

6. Public Access

6.1.3 Key Policy

The rights of access to the shoreline, public lands, and along the coast, and opportunities for recreational hiking access shall be protected, encouraged, and enhanced.

Consistency Analysis

Traffic delays on State Route 1 may occur during project construction due to temporary closures on the southbound lane of the highway. The proposed transportation management plan would ensure that coastal access via State

Route 1 would be consistent throughout project construction. Ultimately, by replacing the failed retaining wall, the project would ensure continued and consistent coastal access via State Route 1. Therefore, the project would be consistent with these policies.

Appendix C Avoidance, Minimization, and/or Mitigation Summary

Aesthetics (2.1.1)

With the implementation of the following avoidance and minimization measures, the project would be consistent with the aesthetic and visual resource protection goals along State Route 1, and potential visual impacts would be reduced:

VIS 1: Preserve as much existing vegetation as possible. Prescriptive clearing and grubbing and grading techniques that save the most existing vegetation possible should be used.

VIS 2: Revegetate all areas disturbed by the project, including but not limited to temporary access roads, staging, and other areas with native plant species appropriate to each specific work location.

VIS 3: Replacement planting shall include aesthetic considerations and inherent biological goals. Replanting shall include native trees and plants as determined by a Caltrans biologist and the Caltrans District 5 Landscape Architecture Department. Replanting shall occur at the maximum extent horticulturally viable and be maintained until established.

VIS 4: Following construction, regrade and recontour any new construction access roads, staging areas, and other temporary uses as necessary to match the surrounding natural topography along State Route 1 and avoid unnatural-appearing remnant landforms.

VIS 5: All visible concrete drainage elements, including, but not limited to, headwalls, drain inlet aprons, etc., should be colored to blend with the surroundings and reduce reflectivity. The specific colors of these concrete elements shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 6: All visible metal components related to downdrains and inlets, including but not limited to flared end sections, connectors, anchorage systems, safety cable systems, etc., should be darkened or colored to blend with the surroundings and reduce reflectivity. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 7: ST-75B Bridge Rails shall be colored and/or darkened to blend with the natural setting. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 8: The concrete barrier slab associated with ST-75B shall be colored and/or darkened to blend with the nearby shoulders. The exposed top surface of the barrier slab should have an overlay or be colored to match the color of the nearby asphalt roadway lanes. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 9: All metal roadside elements, including but not limited to the Midwest Guardrail System, guardrail transitions, and end treatments, should be stained or darkened to be visually compatible with the rural setting. The color shall be determined and approved by the Caltrans District 5 Landscape Architecture Department.

VIS 10: The vertical wall piles should be colored and/or darkened to be visually compatible with the rural setting. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 11: If timber lagging is not used, then concrete lagging should be colored and/or darkened to blend with the surrounding hillside. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

VIS 12: If whalers are used, they should be colored and/or darkened to be visually compatible with the rural setting. The specific color shall be determined by the Caltrans District 5 Landscape Architecture Department.

Air Quality (2.1.3)

The potential for air quality impacts generated by project construction would be minimized with the implementation of the following measure:

AIR 1: To minimize dust emissions from the project, Section 14-9.02 (Air Pollution Control) of the 2018 Standard Specifications states that the contractor is responsible for complying with all local air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the contract, including those provided in Government Code Section 11017 (Public Contract Code Section 10231). Incorporate appropriate engineering design and Stormwater Best Management Practices during construction.

Biological Resources (2.1.4)

Potential impacts to biological resources as a result of the project would be reduced to less than significant under CEQA with the implementation of the following avoidance and minimization measures:

BIO 1: Native, nonornamental trees removed that have a diameter at breast height of greater than 6 inches may be replanted, as required, at a 1-to-1 ratio to mitigate for visual resources and biological resource-related habitat loss.

BIO 2: During construction, Caltrans would ensure that the spread or introduction of invasive exotic plant species would be avoided to the maximum extent possible.

BIO 3: When practicable, invasive exotic plants in the project site shall be removed and properly disposed of. All invasive vegetation removed from the construction site shall be taken to a landfill to prevent the spread of invasive species. If the soil from weedy areas must be removed offsite, the top 6 inches of soil containing the seed layer in areas with weedy species shall be disposed of at a landfill.

BIO 4: If necessary, wash stations onsite shall be established for construction equipment under the guidance of Caltrans to avoid and minimize the spread of invasive plants and/or seeds within the construction area.

BIO 5: Before any ground-disturbing activities, Environmentally Sensitive Area fencing would be installed around trees and other vegetation designated to be protected within the project limits. Protection limits would be noted on design plans and delineated in the field before the start of construction activities.

BIO 6: Only U.S. Fish and Wildlife Service-approved biologists would participate in activities associated with the capture, handling, and monitoring of California red-legged frogs. Biologists authorized under this biological opinion do not need to resubmit their qualifications for subsequent projects conducted pursuant to this biological opinion unless we have revoked their approval at any time during the life of this biological opinion.

BIO 7: Ground disturbance would not begin until written approval is received from the U.S. Fish and Wildlife Service that the biologist is qualified to conduct the work unless the individual(s) has/have been approved previously and the U.S. Fish and Wildlife Service has not revoked that approval.

BIO 8: A U.S. Fish and Wildlife Service-approved biologist would survey the project site no more than 48 hours before the start of work activities. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist would be allowed sufficient time to move them from the site before work begins. The U.S. Fish and Wildlife Service-approved biologist would relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and that would not be affected by project construction activities. The relocation site should be in the same drainage to the extent practicable. Caltrans would coordinate with the Service on the relocation site before the capture of any California red-legged frogs.

BIO 9: Before any activities begin on the project, a U.S. Fish and Wildlife Service-approved biologist would conduct a training session for all

construction personnel. At a minimum, the training would include a description of the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the California red-legged frog for the current project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

BIO 10: A U.S. Fish and Wildlife Service-approved biologist would be present at the work site until all California red-legged frogs have been relocated out of harm's way, workers have been instructed, and disturbance of habitat has been completed. After this time, the state or a local sponsoring agency would designate a person to monitor onsite compliance with all minimization measures. The U.S. Fish and Wildlife Service-approved biologist would ensure that this monitor receives the training outlined in Measure BIO 8 above and in the identification of California red-legged frogs. If the monitor or the U.S. Fish and Wildlife Service-approved biologist recommends that work be stopped because California red-legged frogs would be affected in a manner not expected by Caltrans and the Service during a review of the proposed action, they would notify the resident engineer (the engineer that is directly overseeing and in command of construction activities) immediately. The resident engineer would either resolve the situation by eliminating the adverse effect immediately or require that all actions causing these effects be stopped. If work is stopped, the Service would be notified as soon as possible.

BIO 11: During project activities, all trash that may attract predators would be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris would be removed from work areas.

BIO 12: All refueling, maintenance, and staging of equipment and vehicles would occur at least 60 feet from riparian habitat or water bodies and in a location where a spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water). The monitor would ensure contamination of habitat does not occur during such operations. Before the start of work, Caltrans would ensure that a plan is in place for a prompt and effective response to any accidental spills. All workers would be informed of the importance of preventing spills and the appropriate measures to take should a spill occur.

BIO 13: Habitat contours would be returned to their original configuration at the end of project activities. This measure would be implemented in all areas disturbed by activities associated with the project unless the Service and Caltrans determine that it is not feasible or modification of original contours would benefit the California red-legged frog.

BIO 14: The number of access routes, the size of staging areas, and the total area of the activity would be limited to the minimum necessary to achieve the project goals. Environmentally Sensitive Areas would be delineated to confine access routes and construction areas to the minimum area necessary to complete construction and minimize the impact to California red-legged frog habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable.

BIO 15: Caltrans would attempt to schedule work activities for times of the year when impacts to the California red-legged frog would be minimal. For example, work that would affect large pools that may support breeding would be avoided, to the maximum degree practicable, during the breeding season (November through May). Isolated pools that are important in maintaining California red-legged frogs through the driest portions of the year would be avoided, to the maximum degree practicable, during the late summer and early fall. Habitat assessments, surveys, and coordination between Caltrans and the Service during project planning would be used to assist in scheduling work activities to avoid sensitive habitats during key times of the year.

BIO 16: To control sedimentation during and after project implementation, Caltrans and the sponsoring agency would implement the best management practices outlined in any authorizations or permits issued under the authority of the Clean Water Act that it receives for the specific project. If best management practices are ineffective, Caltrans would attempt to remedy the situation immediately, in coordination with the Service.

BIO 17: If a work site is to be temporarily dewatered by pumping, intakes would be completely screened with wire mesh not larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. Water would be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any diversions or barriers to flow would be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the streambed would be minimized to the maximum extent possible; any imported material would be removed from the streambed upon project completion.

BIO 18: Unless approved by the Service, water would not be impounded in a manner that may attract California red-legged frogs.

BIO 19: A U.S. Fish and Wildlife Service-approved biologist would permanently remove any individuals of non-native species, such as bullfrogs *(Rana catesbeiana)*, signal and red swamp crayfish *(Pacifastacus leniusculus; Procambarus clarkii),* and centrarchid fishes from the project area to the maximum extent possible. The U.S. Fish and Wildlife Service-approved biologist would be responsible for ensuring his or her activities comply with the California Fish and Game Code.

BIO 20: If Caltrans demonstrates that disturbed areas have been restored to conditions that allow them to function as habitat for the California red-legged frog, these areas would not be included in the amount of total habitat permanently disturbed.

BIO 21: To ensure that diseases are not transported between work sites by the U.S. Fish and Wildlife Service-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force would be followed at all times. A copy of the code of practice is enclosed.

BIO 22: Project sites would be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials would be used to the extent practicable. Invasive, exotic plants would be controlled to the maximum extent practicable. This measure would be implemented in all areas disturbed by activities associated with the project unless the Service and Caltrans determine that it is not feasible or practical.

BIO 23: Caltrans would not use herbicides as the primary method used to control invasive, exotic plants. However, if Caltrans determines the use of herbicides is the only feasible method for controlling invasive plants at a specific project site, it would implement the following additional protective measures for the California red-legged frog:

a. Caltrans would not use herbicides during the breeding season for the California red-legged frog;

b. Caltrans would conduct surveys for the California red-legged frog immediately before the start of any herbicide use. If found, California red-legged frogs would be relocated to suitable habitat far enough from the project area that no direct contact with herbicides would occur;

c. Giant reed and other invasive plants would be cut and hauled out by hand and painted with glyphosates or glyphosate-based products, such as AquaMaster® or Rodeo®.

d. Licensed and experienced Caltrans staff or a licensed and experienced contractor would use a hand-held sprayer for foliar application of AquaMaster® or Rodeo® where large monoculture stands occur at an individual project site;

e. All precautions would be taken to ensure that no herbicide is applied to native vegetation.

f. Herbicides would not be applied on or near open water surfaces (no closer than 60 feet from open water).

g. Foliar applications of herbicide would not occur when wind speeds are in excess of 3 miles per hour.

h. No herbicides would be applied within 24 hours of forecasted rain.

i. Application of all herbicides would be done by qualified Caltrans staff members or contractors to ensure that overspray is minimized, that all application is made in accordance with label recommendations, and with the implementation of all required and reasonable safety measures. A safe dye would be added to the mixture to visually denote treated sites. Application of herbicides would be consistent with the U.S. Environmental Protection Agency's Office of Pesticide Programs and Endangered Species Protection Program county bulletins.

BIO 24: Upon project completion, Caltrans shall ensure that a Project Completion Report is completed and provided to the Ventura Office of the U.S. Fish and Wildlife Service, following the template provided with the Programmatic Biological Opinion. Caltrans shall include recommended modifications of the protective measures if alternative measures would facilitate compliance with the provisions of this consultation.

BIO 25: Within 30 days before initiation of site disturbance and/or construction, a qualified biologist should conduct a preconstruction survey for nesting birds if vegetation disturbance or tree removal cannot be scheduled outside of the typical nesting bird season (February 14 to September 30).

BIO 26: Active bird nests would not be disturbed, and eggs or young birds covered by the Migratory Bird Treaty Act and California Fish and Game Code would not be killed, destroyed, injured, or harassed at any time (harassment includes noise from construction activities). If an active bird nest is found in or near a location that would be disturbed, a Caltrans biologist would determine an appropriate buffer based on the habits and needs of the species. An Environmentally Sensitive Area would be established, and the nest area would be avoided until the nest is vacated and the juveniles have fledged.

BIO 27: If roosting bats are discovered within the project area, the resident engineer shall immediately contact the project biologist on how to proceed. The biologist would coordinate with the California Department of Fish and Wildlife if necessary.

Greenhouse Gas Emissions

The potential for greenhouse gas impacts generated by project construction would be reduced to less than significant under CEQA with the implementation of the following minimization measures:

GHG 1: Limit idling to five minutes for delivery and dump trucks and other diesel-powered equipment when not in active operation.

GHG 2: Use alternative fuels such as renewable diesel or solar power for construction equipment when available.

GHG 3: For improved fuel efficiency from construction equipment:

- Maintain equipment in proper tune and working condition
- Use right sized equipment for the job
- Use equipment with new technologies

GHG 4: Use recycled materials in the construction of new project features onsite when possible. This may include processing waste to create usable fill and maximizing the use of recycled materials that meet Caltrans specifications for incorporation into new work.

GHG 5: Reduce construction waste when possible. For example, reuse or recycle construction and demolition waste to reduce consumption of raw materials, reduce waste and transportation to landfills, and save costs.

Hazards and Hazardous Materials (2.1.9)

The potential for impacts generated by project construction would be reduced to less than significant under CEQA with the implementation of the following minimization measures.

HAZ 1: The project would include Caltrans Standard Specifications related to fire prevention and fire safety to minimize the potential for igniting nearby vegetation during construction activities, along with implementing the California Division of Occupational Safety and Health Fire Protection and Prevention Guidance.

HAZ 2: When handling and applying fire-retardant paint, the construction contractor must follow the manufacturer's safety protocols for workers and observe cleanup protocols in the event of an accidental spill.

Noise (2.1.13)

The potential for noise impacts generated by project construction would be minimized with the implementation of the following measures:

NOISE 1: Each internal combustion engine, used for any purpose on the job, or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the job site without an appropriate muffler.

NOISE 2: Notify the public in advance of the construction schedule when construction noise and upcoming construction activities likely to produce an adverse noise environment are expected. This notice shall be given two

weeks in advance. Notice should be published in local news media of the dates and duration of the proposed construction activity. The District 5 Public Information Office posts notice of proposed construction and potential community impacts after receiving notice from the resident engineer.

NOISE 3: Shield especially loud pieces of stationary construction equipment.

NOISE 4: Locate portable generators, air compressors, etc., away from sensitive noise receptors.

NOISE 5: Limit grouping major pieces of equipment operating in one area to the greatest extent feasible.

NOISE 6: Place heavily trafficked areas such as the maintenance yard, equipment, tool, and other construction-oriented operations in locations that would be the least disruptive to surrounding sensitive noise receptors.

NOISE 7: Use newer equipment that is quieter and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators, intact and operational. Internal combustion engines used for any purpose on or related to the job shall be equipped with a muffler or baffle of a type recommended by the manufacturer.

NOISE 8: Consult District noise staff if complaints are received during the construction process.

The following Caltrans Standard Specification for noise control would also be implemented:

NOISE 9: To minimize impacts on residents' normal nighttime sleep activities, it is recommended that, whenever possible, construction work be done during the day. If nighttime construction is necessary, the noisiest construction activities would be done as early in the evening as possible. Caltrans Standard Specifications Section 14-8.02 Noise Control would be implemented. This standard specification requires the contractor to control and monitor noise resulting from work activities and not to exceed 86 A-weighted decibels maximum sound level at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

Transportation (2.1.17)

The following avoidance and minimization measure would further reduce the potential for impacts on transportation:

TRAFFIC-1: A Traffic Management Plan is required to address any potential traffic delays on State Route 1 that may occur during project construction due to temporary lane closures. This would ensure that coastal access via State

Route 1 would be maintained at all times throughout the construction period and would account for emergency access while limiting delays.

List of Technical Studies Bound Separately (Volume 2)

- Air Quality, Noise, and Water Quality Technical Assessment Memorandum (December 18, 2022)
- Climate Change Technical Report (February 8, 2023)
- Cultural Resources Screened Undertaking Memorandum (January 9, 2023)
- Cumulative Impact Report (March 16, 2023)
- Geotechnical Reports
    - Geotechnical Design Report (May 11, 1998)
    - Geotechnical Assessment and Recommendations (May 21, 2021)
    - Structure Preliminary Geotechnical Report (March 16, 2022)
- Hazardous Waste Initial Site Assessment Memorandum (December 19, 2022)
- Natural Environment Study (Minimal Impacts) (January 9, 2023)
- Paleontological Identification Report (December 19, 2023)
- Visual Impact Assessment (February 23, 2023)

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

Lara Bertaina
District 5 Environmental Division
California Department of Transportation
50 Higuera Street, San Luis Obispo, California 93401

Or send your request via email to: lara.bertaina@dot.ca.gov
Or call: 805-779-0792

Please provide the following information in your request:
Project title: Coastlands II Retaining Wall
General location information: On State Route 1 in Monterey County at post mile 44.34, 1.1 miles south of Pfeiffer Canyon Bridge near Big Sur
District number-county code-route-post mile: 05-MON-01-PM 44.34
Project ID number: 0521000188