State Route 68 Drainage Improvements

Multiple culvert improvements along State Route 68 in Monterey County
from west of Sunset Drive to the Toro Park Undercrossing
05-MON-68-PM 0.2-15.7
Project ID Number 0518000083/Project EA 05-1J880
State Clearinghouse Number 2022010336

Initial Study
with Mitigated Negative Declaration

Volume 1 of 2



Prepared by the
State of California Department of Transportation

June 2022

Caltrans

General Information About This Document

[The following text has been added since the draft environmental document was circulated.] Document prepared by: Jill O'Connor, Associate Environmental Planner

[The following text has been added since the draft environmental document was circulated.] The Initial Study circulated to the public for 32 days between January 21, 2022, and February 21, 2022. Comments received during this period are included in Appendix E. Elsewhere, language has been added throughout the document to indicate where a change has been made since the circulation of the draft environmental document. Minor editorial changes and clarifications have not been so indicated.

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State Clearinghouse Number 2022010336
05-MON-68-PM 0.2-15.7
Project ID Number 0518000083
Project EA 05-1J880

Repair or replace culverts, replace lights near Fairground Road, and install two new traffic census stations on State Route 68 from post miles 0.2 to 15.7 in Monterey County

INITIAL STUDY
with Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation
and
California Transportation Commission

John Luchetta
Deputy District Director, Environmental Analysis, District 5
California Department of Transportation
CEQA Lead Agency

June 7, 2022
Date

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

Matt C. Fowler, Environmental Branch Chief, California Department of Transportation, District 5; 50 Higuera Street, San Luis Obispo, California 93401; 805-779-0793, matt.c.fowler@dot.ca.gov

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number 2022010336

District-County-Route-Post Mile: 05-MON-68-PM 0.2-15.7

EA/Project Number: EA 05-1J880 and Project ID Number 0518000083

Project Description

The California Department of Transportation (Caltrans) proposes to construct improvements to existing drainage infrastructure at multiple locations along State Route 68 in Monterey County from west of Sunset Drive in Pacific Grove to the Toro Park Undercrossing (post mile 0.2 to post mile 15.7). The project also includes replacing additional lighting elements near Fairground Road and two new traffic census stations.

Determination

Caltrans District 5 has prepared this Initial Study with Mitigated Negative Declaration for this project, and, following public review, has determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

[The following text has been updated since the draft environmental document was circulated.] The project will have no effect on agriculture and forest resources, cultural resources, tribal cultural resources, energy, land use and planning, mineral resources, population and housing, public services, and recreation.

In addition, the project will have less than significant effects on aesthetics/visual resources, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation, utilities and service systems, and wildfire risk with the implementation of Caltrans' Standard Specifications, Standard Special Provisions, and avoidance and minimization measures prescribed herein.

With the incorporation of the following mitigation measures, the project will have less than significant effects on biological resources:

- BIO-1: Restoration (reestablishment) of impacted jurisdictional waters is proposed at a 1-to-1 ratio (acreage) for temporary impacts. Compensatory mitigation is proposed at a 3-to-1 ratio (acreage) for permanent impacts and a 1.5-to-1 ratio (acreage) for degradation impacts (e.g., installation of rock slope protection over gravel filter). Replacement plantings will include appropriate native tree and understory species; they will also include developed planting

specifications and grading plans to ensure the survival of planted vegetation and reestablishment of functions and values. The project will also implement measures required by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the Coastal Development Permits as part of the project permitting process. A three-year plant establishment period, monitoring, semiannual (twice per year) inspections, weeding, and plant replacement, as necessary, will be implemented for Culvert Locations 6 (post mile 2.20), 8 (post mile 2.73), 9 (post mile 2.80), 19 (post mile 6.32), 20 (post mile 9.05) and 23 (post mile 10.29).

- BIO-14: Monterey pine trees will be replaced onsite at a 1-to-1 ratio in non-jurisdictional areas. Monterey pines that are less than 24 inches in diameter at breast height and in jurisdictional areas will be replaced at a 3-to-1 ratio, and Monterey pines that are 24 inches or larger in diameter at breast height in jurisdictional areas will be replaced at a 10-to-1 ratio. Tree plantings will be monitored to ensure successful revegetation at six months and then once a year for three years.
- BIO-17: Coast live oak trees will be replaced onsite at a 1-to-1 ratio in non-jurisdictional areas. Coast live oak trees that are less than 24 inches in diameter at breast height and occur within jurisdictional areas will be replaced at a 3-to-1 ratio. Coast live oak trees that are 24 inches or larger in diameter at breast height and occur within jurisdictional areas will be replaced at a 10-to-1 ratio. Tree plantings will be monitored to ensure successful revegetation at six months and then once a year for three years.
- BIO-35: The Section 2081 Incidental Take Permit to be acquired for the project is expected to require compensatory habitat mitigation and permanent protection and perpetual management of up to 0.018 acre for permanent impacts to potential California tiger salamander upland habitat (up to a 3-to-1 compensatory mitigation ratio for 0.006 acre of permanent impacts) and up to 2.427 acres for temporary impacts to potential California tiger salamander upland and breeding habitat (up to a 1-to-1 compensatory mitigation ratio for 2.427 acres of temporary impacts), resulting in an expected compensatory mitigation lands total of 2.445 acres. Before starting ground-disturbing or vegetation-disturbing project activities, Caltrans will satisfy the requirement to provide an expected 2.445 acres of California tiger salamander habitat by complying with one of the following:
    - Purchase credits equivalent of up to 2.445 acres at a California Endangered Species Act-certified and California Department of Fish and Wildlife-approved Conservation Bank (in a location to be determined) authorized to sell credits for the California tiger salamander; or,

- Acquire, permanently preserve, and perpetually manage up to 2.445 acres of Habitat Management Lands.

John Luchetta
Deputy District Director, Environmental Analysis, District 5
California Department of Transportation

June 7, 2022
Date

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Chapter 1 Proposed Project

1.1 Introduction

State Route 68 is a two-to-four-lane arterial and conventional highway in Monterey County, California, which connects the Monterey Peninsula to State Route 1 and U.S. Route 101 in the City of Salinas. The California Department of Transportation (Caltrans) proposes the State Route 68 Drainage Improvements project, which will construct drainage and lighting improvements and install new traffic census stations along State Route 68, between post miles 0.2 and 15.7. [The following text has been updated since the draft environmental document was circulated.] Drainage improvements are proposed for culverts at 27 locations that are in degraded or substandard condition and need to be repaired or replaced.

The project is included in the Association of Monterey Bay Area Governments' 2021 Metropolitan Transportation Improvement Program (Federal Statewide Transportation Improvement Program), which was approved on April 16, 2021. The project is programmed for funding from the 2020 State Highway Operation and Protection Program, Roadway Preservation (program code 201.151). Project construction is expected to start in early 2025 and take about one year to complete. The current programmed cost for the construction of the Build Alternative is $11,000,000.

Caltrans, as assigned by the Federal Highway Administration, is the lead agency under the National Environmental Policy Act (known as NEPA). Caltrans is also the lead agency under the California Environmental Quality Act (known as CEQA). As the NEPA lead, Caltrans is preparing a Categorical Exclusion document for the project. As the CEQA lead, Caltrans is preparing this Initial Study with Mitigated Negative Declaration document for the project.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to ensure the long-term serviceability of the highway by restoring and improving drainage facilities and lighting and traffic monitoring equipment at multiple locations on State Route 68 from post mile 0.2 to post mile 15.7.

1.2.2 Need

A culvert inventory assessment conducted in 2012 identified at least 34 culverts on State Route 68 within the project limits that show varying degrees

of damage and/or deterioration. Since the 2012 inventory assessment, further review by Caltrans has eliminated some of the culvert locations from the current proposed improvements for various reasons, including repairs that have since been constructed as part of other Caltrans projects and/or by other public agencies. In addition, several of the locations were determined to be outside of the state highway right-of-way and, therefore, the responsibility of others to maintain or repair. [The following text has been updated since the draft environmental document was circulated.] The project includes repairs in 27 locations within 24 culvert systems on State Route 68.

If damaged culverts are not repaired or replaced, there is a high potential that the highway embankment at the culvert locations will begin to erode, leading to roadway damage and/or failure. In addition, the lighting system at several intersections along the route, including bulbs, conduit, and electrical panels, are outdated and nearing the end of their useful life. If the lighting equipment conditions are left unaddressed, the systems will eventually fail and pose traffic sight distance concerns. Further, there are currently no traffic monitoring stations on State Route 68 within the project limits. New traffic count census stations (census stations) are needed to provide complete and accurate traffic data for the management of the State Route 68 corridor.

1.3 Project Description

This section describes the action and the project alternatives developed to meet the purpose and need of the project while avoiding or minimizing environmental impacts. The alternatives are the Build Alternative and the No-Build Alternative. Further details that pertain to the description of the Build Alternative components are provided in Section 1.4.1., Build Alternatives.

[The following text has been updated since the draft environmental document was circulated.] Caltrans proposes drainage and lighting improvements and the installation of Transportation Management System monitoring equipment at various locations along State Route 68 in Monterey County from post mile 0.2 to post mile 15.7. Improvements to 24 drainage culvert systems are proposed, including joint repair and/or a complete replacement, depending on the conditions at each location. Lighting system improvements are planned on State Route 68 near Fairground Road at post mile R4.04, and two new traffic census stations will be installed along the State Route 68 corridor where there is a gap in traffic monitoring equipment.

Figure 1-1 shows the project vicinity map, and Figure 1-2 shows the project location map for the project. Preliminary project plans are included in Appendix B, and detailed descriptions of the planned culvert improvements at each location are provided in Table 1.1 and Appendix C.

Project Location and Route Setting

State Route 68 is a federally classified Minor Arterial from post mile 0.2 to post mile 1.1 and a Principal Arterial from post mile 1.1 to post mile 15.7. The project limits are separated into two segments by State Route 1. The segment of the route from post mile 0.00 to post mile L4.264 is known as Holman Highway, and the segment from post mile R3.949 to post mile 20.104 is known as the Monterey-Salinas Highway. The route within most of the project limits (up to post mile 15.15) is a two-to-four-lane divided conventional highway with left/right turn pockets, 12-foot travel lanes, and 4-to-10-foot shoulders.

Figure 1-1 Project Vicinity Map

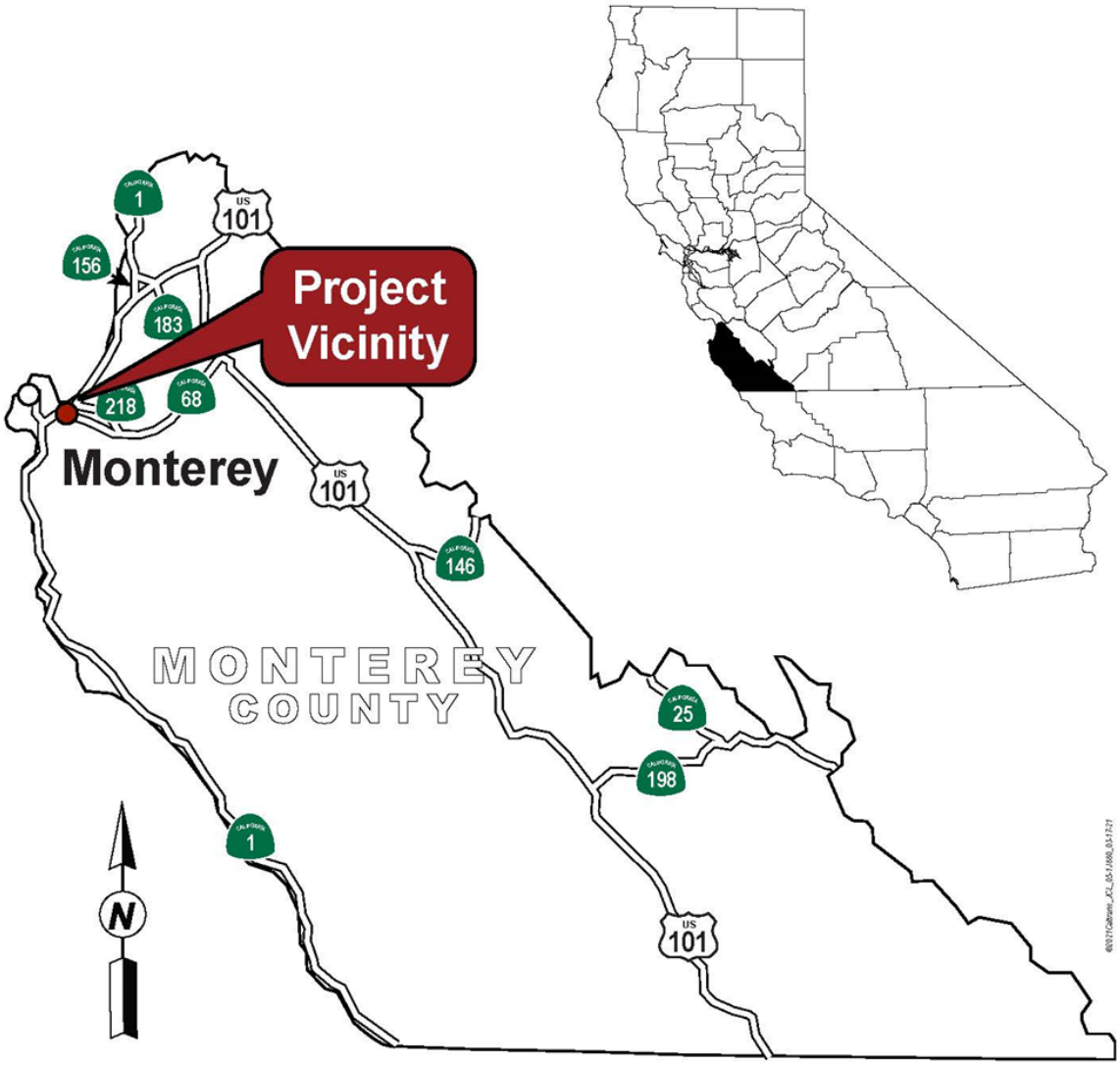


Figure 1-2 Project Location Map (1 of 2)

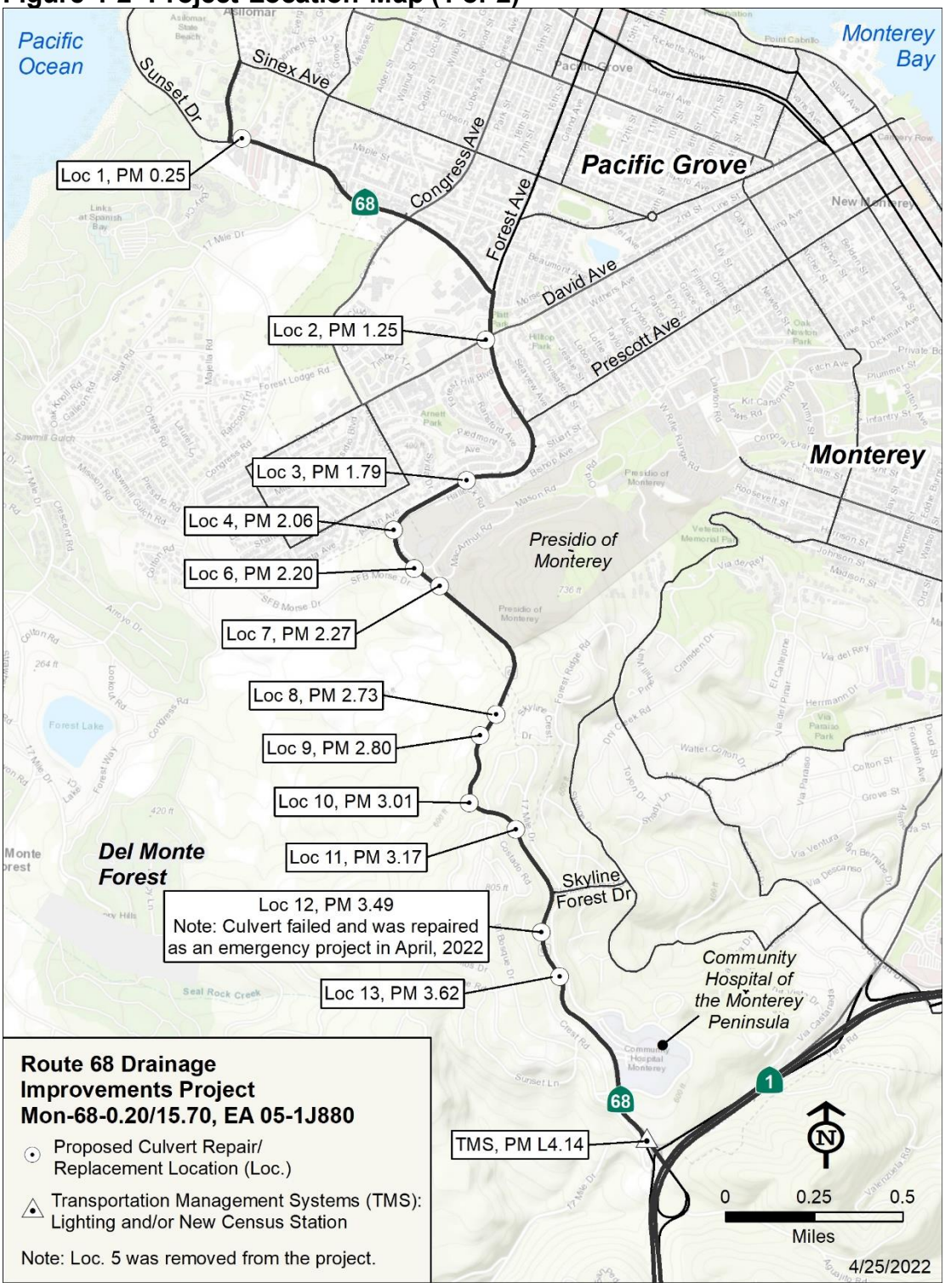
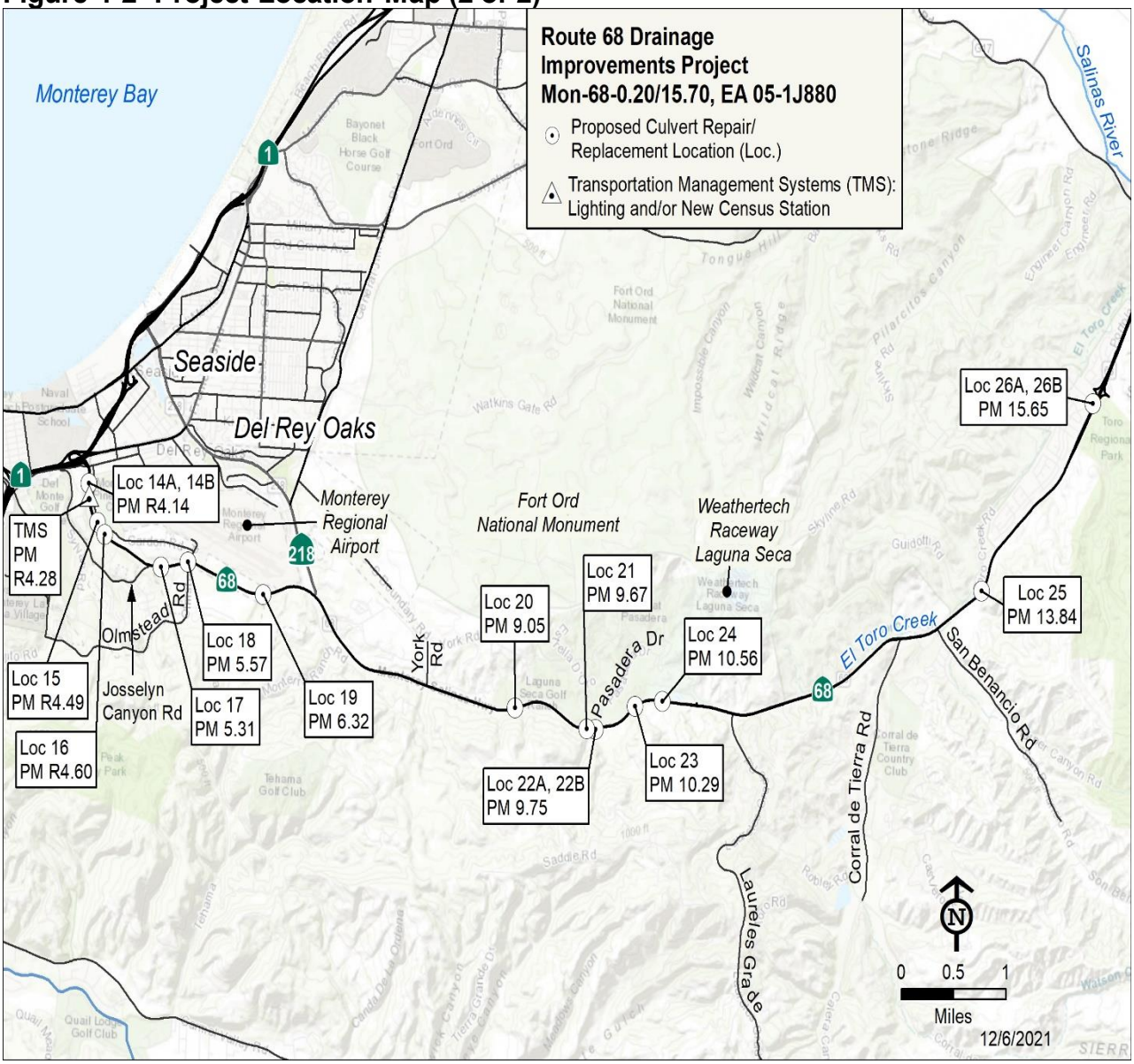


Figure 1-2 Project Location Map (2 of 2)



State Route 68 is classified as a freeway from post miles 15.15 to 15.7. Figure 1-3 illustrates the State Route 68 highway facility types. Portions of the route are in the coastal zone, from post miles 0.2 to 0.30 and post miles 2.0 to L4.264. A portion of State Route 68 is an Officially Designated Scenic Highway from post mile L4.3 to post mile R17.8 (partially overlapping with State Route 1 and from State Route 1 to the Salinas River) and an Eligible Scenic Highway from post mile 0.0 to post mile L4.264 from the City of Monterey to State Route 1. Figure 1-4 illustrates the boundaries of the coastal zone in relation to the project limits and the Scenic Highway designations within the project limits (Caltrans District 5, State Route 68 Transportation Corridor Report, October 2013).

Figure 1-3 State Route 68 Highway Facility Types

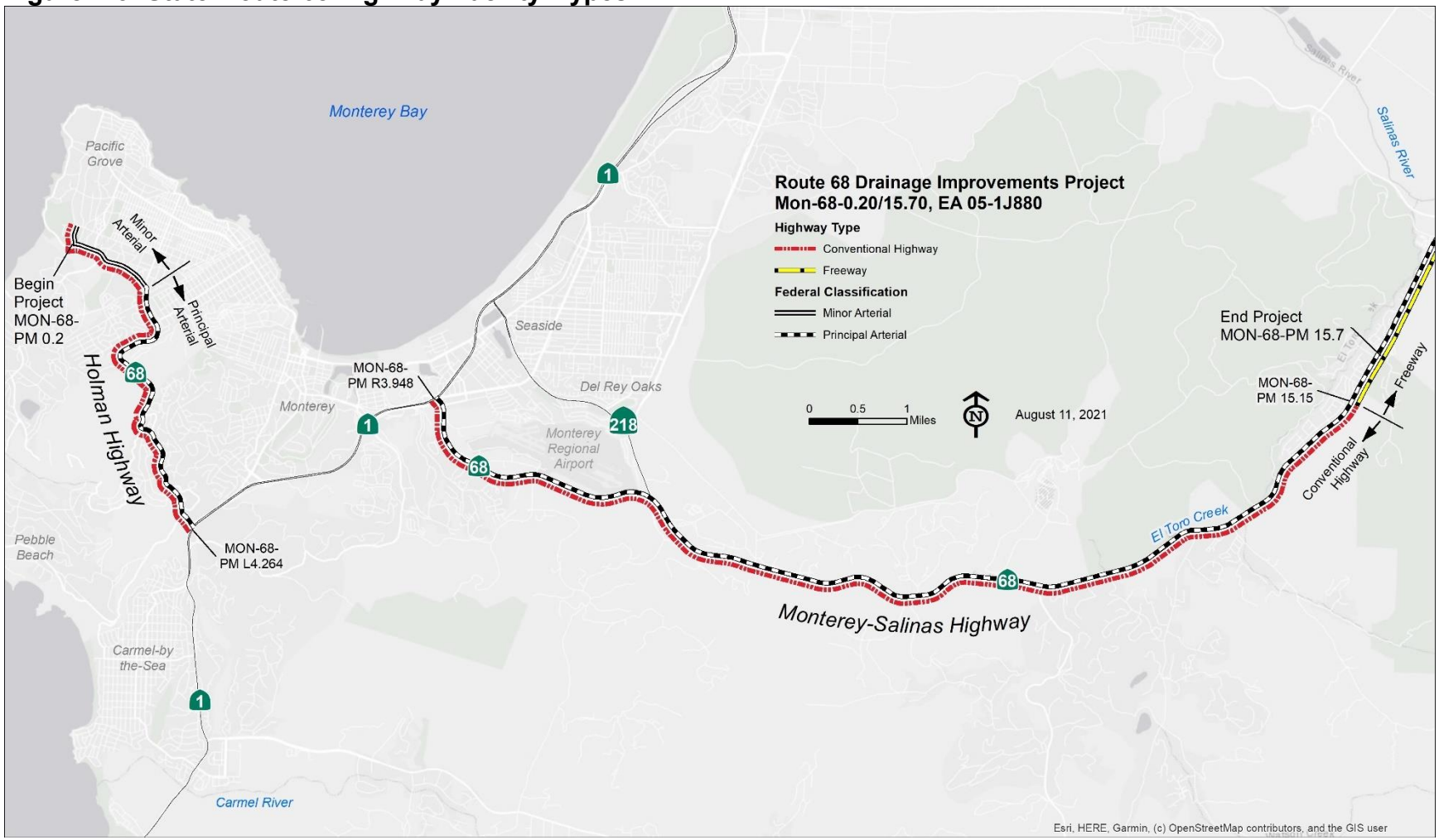


Figure 1-4 Coastal Zone Boundary and Scenic Highway Designations



1.4 Project Alternatives

[The following text has been updated since the draft environmental document was circulated.] A Build Alternative and a No-Build Alternative were considered for this project.

1.4.1 Build Alternatives

[The following text has been updated since the draft environmental document was circulated.] Under the Build Alternative, the project will repair or replace portions of 24 drainage culvert systems on State Route 68, between post mile 0.2 and post mile 15.7. Several of the systems will have two locations (labeled A and B), where improvements are proposed, for a total of 27 repair locations. The number of drainage repair locations and systems included in the project has been reduced by one from the total described in the draft Initial Study with Proposed Mitigated Negative Declaration. After the public review period for the draft Initial Study with Proposed Mitigated Negative Declaration was concluded, the existing culvert at Location 12, post mile 3.49, experienced failure, requiring immediate repair. This culvert was, therefore, replaced under an emergency repair project in April 2022 and is removed from the planned drainage infrastructure improvements within the project limits. An explanatory note is included in this final Initial Study with Mitigated Negative Declaration where that culvert is referenced.

[The following text has been updated since the draft environmental document was circulated.] Drainage facility repairs will include various types of improvements specific to the needs of the individual culvert locations, among which may include complete replacement of the existing pipes, joint repairs, adding new inlets, flared end sections, concrete collars, and rock slope protection. The existing culverts range in size from 18 to 60 inches in diameter and range in age from 25 to 70 years old. Some of the planned improvements will require drainage and maintenance access easements and temporary construction easements, as further discussed below. Lighting system improvements are planned at the interchange of State Route 68 and Fairground Road at post mile R4.04. Improvements will include the replacement of underground electrical conduits, electrical panels, service connection cabinets, and light bulbs. The Build Alternative will also include the installation of two new traffic census stations along the State Route 68 corridor, where there is a gap in traffic monitoring equipment. Traffic census stations are a type of asset in Caltrans' Transportation Management System program.

The following discussion describes in further detail the specific improvements proposed for the drainage culverts, lighting, traffic census station systems, and other components included with the Build Alternative. Figure 1-2 illustrates the locations of the proposed culvert and Transportation Management System improvements of the Build Alternative. Table 1.1 describes the project culvert repair, lighting, and census station locations and the proposed improvements at each location based on preliminary design information.

Table 1.1 Proposed Drainage and Other Improvements

Culvert Location Number	Site Location on State Route 68 (Distances Approximate)	Proposed Activity
1	120 feet east of Asilomar Avenue at Crocker Avenue (Post Mile 0.25)	Replace an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Construct asphalt concrete dike and asphalt concrete spillway along westbound State Route 68. Regrade channel area at node 3.
2	On David Avenue, crossing State Route 68 (Forest Drive) (Post Mile 1.25)	Replace an existing 24-inch high-density polyethylene with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Modify existing drainage inlets at nodes 2 and 3.
3	225 feet southwest of Adobe Lane and 570 feet north of Syidar Drive (Post Mile 1.79)	Replace an existing 18-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Also, furnish and install a new drainage inlet at node 2.
4	340 feet south of Presidio Boulevard (Post Mile 2.06)	Replace 10 feet of an existing 18-inch reinforced concrete pipe with an 18-inch reinforced concrete pipe at node 1. Guard railing reconstruction will be required for access to the culvert outlet. Furnish and install a flared end section and rock slope protection at the outlet.
6 (Culvert number 5 was determined to be privately owned and therefore removed from the project)	350 feet north of Morse Drive (Post Mile 2.2)	Replace an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Also, furnish and install a flared end section and rock slope protection at the inlet and outlet.
7	100 feet east of Morse Drive (Post Mile 2.27)	Replace a culvert headwall and an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe. Modify the manhole at node 3.
8	0.37 mile north of Scenic Drive (Post Mile 2.73)	Replace an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the trenchless construction method. Also, furnish and install two flared end sections and rock slope protection at the inlet and outlet locations. Two temporary access roads and jacking pits will be created for construction access.

Culvert Location Number	Site Location on State Route 68 (Distances Approximate)	Proposed Activity
9	0.30 mile north of Scenic Drive (Post Mile 2.80)	Replace an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the trenchless construction method. Also, furnish and install two new flared end sections and rock slope protection at the inlet and outlet locations. Two temporary access roads and jacking pits will be created for construction access.
10	275 feet northwest of Scenic Drive (Post Mile 3.01)	Abandon an existing 18-inch composite culvert. Construct a 24-inch reinforced concrete pipe at a shallower depth by using the cut-and-cover construction method. Also, furnish and install a new drainage inlet and construct a flared end section and rock slope protection at the outlet location.
11	450 feet south of Scenic Drive (Post Mile 3.17)	Replace an existing elliptical corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Also, furnish and install a new drainage inlet and install a new flared end section and rock slope protection at the outlet location.
12	0.12 mile or about 630 feet south of Skyline Forest Drive (Post Mile 3.49) [The following text has been updated since the draft environmental document was circulated.] This culvert failed and was replaced under an emergency project in April 2022.	Replace an existing 18-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Furnish and install a new drainage inlet at node 2 and construct a new flared end section and rock slope protection at the outlet. Modify an existing drainage inlet at node 2.
13	0.25 mile south of Skyline Forest Drive (Post Mile 3.62)	Replace an existing 18-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the trenchless construction method. Furnish and install a new drainage inlet at node 2 and construct a flared end section and rock slope protection at the outlet location. Two temporary access roads and jacking pits will be created for construction access.
14A	500 feet south of Fairground Road overcrossing (Post Mile R4.14)	Replace an existing 24-inch corrugated steel pipe with a new 24-inch reinforced concrete pipe using the cut-and-cover construction method. Furnish and install the drainage inlet within the State Right-of-Way to establish limits of the City of Monterey's drainage culvert.
14B	500 feet south of Fairground Road overcrossing (Post Mile R4.14)	Replace an existing 18-inch concrete pipe with a new 18-inch reinforced concrete pipe using the cut-and-cover construction method.

Culvert Location Number	Site Location on State Route 68 (Distances Approximate)	Proposed Activity
15	0.43 mile south of Fairground Road overcrossing (Post Mile R4.49)	Replace an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe from node 3 to node 4 using the cut-and-cover construction method. Modify the manhole at node 4 and modify the drainage inlet at node 3.
16	0.48 mile northwest of Josselyn Canyon Road (Post Mile R4.6)	Abandon a portion of the two existing 30-inch concrete pipes and replace with two new 30-inch reinforced concrete pipes at a shallower depth using the cut-and-cover construction method. Modify the drainage inlet at node 2 and install a new drainage inlet near the existing headwall at the outlet location.
17	330 feet east of Hammond Road, between Josselyn Canyon Road and Oxton Road (Post Mile 5.31)	Replace an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Furnish and install two new flared end sections and rock slope protection at both inlet and outlet locations.
18	North side of State Route 68/Olmsted Road intersection (Post Mile 5.57)	Replace an existing 15-inch corrugated steel pipe with a new 15-inch corrugated steel pipe using the cut-and-cover construction method. Electrical work may involve the replacement of intersection signal conduit and loop detectors. Modify the drainage inlet at node 1. Remove and replace the dike at node 1.
19	0.53 mile west of State Route 218-Monterra Road intersection (Post Mile 6.32)	Replace an existing 24-inch corrugated steel pipe with a 30-inch reinforced concrete pipe using the trenchless construction method. Furnish and install two new flared end sections and rock slope protection at node 1 and node 2. Two temporary access roads and jacking pits will be created for construction access.
20	0.50 mile east of Blue Larkspur Lane entrance drive and 0.82 mile west of Pasadera Drive-Boots Road (Post Mile 9.05)	Replace an existing 48-inch corrugated steel pipe with a 48-inch reinforced concrete pipe using the trenchless construction method. Remove and reconstruct headwalls at inlet and outlet locations. Construct rock slope protection. Two temporary access roads and jacking pits will be created for construction access.
21	630 feet west of Pasadera Drive-Boots Road (Post Mile 9.67)	Replace an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method.
22A	170 feet west of Pasadera Drive-Boots Road (Post Mile 9.75)	Repair the joint near node 2.

Culvert Location Number	Site Location on State Route 68 (Distances Approximate)	Proposed Activity
22B	170 feet west of Pasadera Drive-Boots Road (Post Mile 9.75)	Abandon an existing 12-inch corrugated steel pipe and replace it with a new 12-inch Alternative Pipe Culvert from node 2 to node 3 at a shallower depth using the cut-and-cover construction method. Modify the drainage inlet at node 3 and modify the headwall at node 2.
23	0.40 mile east of Pasadera Drive-Boots Road (Post Mile 10.29)	Replace an existing 18-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the trenchless construction method. Furnish and install a new flared end section and rock slope protection at inlet and outlet locations. Two temporary access roads and jacking pits will be created for construction access.
24	0.70 mile east of Pasadera Drive-Boots Road (Post Mile 10.56)	Replace an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Furnish and install a flared end section and rock slope protection at inlet and outlet locations.
25	0.25 mile west of Guidotti Road-Toro Creek Road (Post Mile 13.84)	Replace an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Furnish and install a flared end section and rock slope protection at inlet and outlet locations.
26A and B	A: next to (south side of) Toro Hills Avenue/Portola Drive (Post Mile 15.65) B: northbound off-ramp Portola Drive next to Toro County Park (Post Mile 15.65)	Replace an existing 3.5-by-2.5-foot elliptical corrugated steel pipe and a 36-inch corrugated steel pipe with a new 8-by-4-foot (span x height) Reinforced Concrete Box using the cut-and-cover construction method. Construct new headwalls at inlet and outlet locations. Furnish and install a new drainage inlet at node 3.
Census Station 1	About 265 feet east of the Community Hospital of the Monterey Peninsula (Post Mile L4.14)	Traffic count (census) station to be installed below the pavement of State Route 68.
Census Station 2	South side of Fairground Road overcrossing of State Route 68 (Post Mile 4.28)	Traffic count (census) station to be installed below the pavement of State Route 68.
Lighting	South of Fairground Road overcrossing of State Route 68 (Post Mile R4.04)	Replacement of two outdated lighting elements (luminaires) and installation of two additional luminaires.

Culvert Repairs

[The following text has been updated since the draft environmental document was circulated.] The planned improvements to the 27 culvert repair locations (24 culvert

systems) include various methods to repair or replace the culverts within the project limits that need restoration.

[The following text has been updated since the draft environmental document was circulated.] For those locations where the existing culvert is planned to be replaced, one of two methods will be used— either cut-and-cover or trenchless construction. Cut-and-cover, or open cut trench method, entails excavation of a trench, removal of the old culvert or abandon in place, preparation of the appropriate bedding for the new culvert, installation of the new culvert and then filling in around the culvert pipe with either slurry/flowable type material or compacted lifts of soil, returning the soil surface to its original condition. Most of the project culvert locations are planned for replacement using a cut-and-cover method. The preliminary design for the Build Alternative also proposes a trenchless method at six of the project culvert systems: Location 8 (post mile 2.73), Location 9 (post mile 2.80), Location 13 (post mile 3.62), Location 19 (post mile 6.32), Location 20 (post mile 9.05), and Location 23 (post mile 10.29). There are several different types of trenchless pipe placement or replacement methods, including jack and bore, hammering/driving, lining, and/or pull/push. The specific type of trenchless method to be used will be determined by the contractor/subcontractor.

The jack and bore method will likely be used at most of the trenchless locations in accordance with the preliminary design recommendations for these locations. The jack and bore method will abandon the existing pipes and install new pipes on a new alignment. Installing the new pipes will involve jacking the pipe horizontally through the ground from a drive shaft or pit to a reception shaft/pit. The pipe will be propelled through the ground by jacks located in the drive shaft. Personnel will be inside the pipe to perform the excavation and/or removal of spoil material. Excavation can be removed manually or mechanically.

The trenchless method will necessitate the provision of temporary pathways for construction equipment access and areas for the jacking and receiving pits. The estimated spatial footprints of these areas based on the preliminary design plans are shown on the layout design maps provided in Appendix B. In general, trenchless or jack and bore operations will require a larger construction work area (e.g., creation of jacking pits on either end of the culvert and temporary roads for construction equipment to access the pits) than a trenching method for culvert repair.

In addition to pipe section replacement, the project culvert improvements will also include the replacement of inlets, joints, concrete collars and adding flared end sections and rock slope protection at outlets as applicable for the specific physical conditions of each culvert repair location, such as the topography, soil types, and drainage conditions. Table C-1 in Appendix C describes the existing infrastructure and the planned improvements at each of the culvert system locations based on preliminary design information.

Lighting Repairs

The project will refurbish existing lighting and add new lighting equipment at the State Route 68/State Route 1 east connectors near the Fairground Road overcrossing at post mile R4.04. Two existing lighting support structures (referred to as electroliers) and lights will be replaced, and two additional electroliers will be installed along the northbound off-ramp of State Route 68 to the Fairground Road overcrossing. One existing double-arm electrolier near the converging point of the off-ramp will be removed. New underground conduit systems, conductors, pull boxes, and service connection cabinets will be installed as needed to support the electrical equipment.

Traffic Count Census Stations

Currently, there are no traffic count census stations along State Route 68. The project will install two new traffic count census stations—one at post mile L4.14 at the westerly interchange of State Route 1 and State Route 68, and one at post mile R4.28 just east of the interchange with Fairground Road (refer to Figure 1-2). The traffic count census stations will provide complete and accurate traffic data for the State Route 68 corridor.

Complete Streets Consistency

The repairs and upgrades to culvert, lighting, and traffic census facilities within the project limits on State Route 68 will be designed to the extent feasible to be consistent and not conflict with any planned or ongoing Complete Streets elements included in other State Route 68 highway improvement projects, such as shoulder widening and provision of bicycle lanes or pedestrian pathways.

Temporary Construction Easements and Permanent Access Rights

Project construction will require temporary construction easements for access onto properties next to the state highway right-of-way during construction activities at selected locations based on preliminary design information. The improvements will also require drainage easements to enable permanent access rights at a few of the culverts outside of the state highway right-of-way for long-term maintenance and repair of culverts and drainage inlets and outlets. The expected locations of temporary construction and drainage easements are shown on the design maps in Appendix B and Table C-2 in Appendix C.

Electrical and natural gas utilities are within the project limits. Utility relocations are not expected to be necessary; however, utility investigation for power connection and to identify any conflicts with the planned culvert repairs will be conducted during the Plans, Specifications, and Estimates phase of the project. Caltrans will continue to coordinate with utility providers throughout the design and construction of the proposed improvements to ensure that no conflicts occur with utility services or equipment.

Geotechnical Investigations

Construction of the replacement culverts requires a subsurface geotechnical investigation to evaluate existing site conditions and to inform design. Vertical borings will be drilled at eight locations within the highway travel way and shoulder areas to collect soil samples for testing, classification and to develop a subsurface soil profile. The geotechnical investigation was addressed in a separate environmental review process with documentation prepared in accordance with the National Environmental Policy Act and the California Environmental Quality Act.

Construction Equipment and Storage

Equipment to be used during project construction may include a crane, loader, drill rig, excavator, backhoe, dump trucks, concrete trucks, grinder, paver, roller, water trucks, traffic control trucks, lowboy, and any other equipment necessary in the course of construction. Construction equipment storage will be limited to disturbed areas within the current Caltrans right-of-way.

Construction Site Preparation

Initial construction site preparation will be required for the culvert repair and other project improvement locations. The site preparation areas will also include expected locations for construction access/haul roads, jacking pits, and equipment staging areas. The preliminary design plans in Appendix B illustrate the Areas of Potential Impact, the physical footprints of the expected combined temporary and permanent areas that will be affected by the project improvements and that are analyzed in this environmental document. Clearing and grubbing of the culvert work areas, temporary and/or permanent access roads for construction and maintenance, and construction and staging areas will be required according to the existing conditions and planned project improvement work at each culvert location.

[The following text has been updated since the draft environmental document was circulated.] Vegetation within the project disturbance areas will be preserved to the maximum extent feasible. Please refer to Section 1.7 (Standard Measures and Best Management Practices Included in All Build Alternatives) for further discussion on standard measures to protect vegetation and sensitive habitat areas within the project construction work areas.

Vehicle Pullouts for Landscape Maintenance

Vehicle pullouts are planned at several locations on State Route 68 to facilitate access for maintenance of landscape revegetation areas after project construction. Graded (unpaved) vehicle pullouts will be located at post miles 2.20, 6.32, and 9.05, and a paved vehicle pullout is planned at post mile R4.28. These locations are within the existing state right-of-way, have had previous ground disturbance, and are devoid of vegetation.

Transportation Management Plan

Traffic management during construction is expected to involve temporary, single-lane closures to maintain traffic access along State Route 68 at most of the culvert

repair locations within the project limits. Selected culvert locations may require full lane or off-ramp and on-ramp closures with either detour routes or other traffic control measures. Any single-lane closures or full closure locations and affiliated detour routes for vehicles, bicyclists, and/or pedestrians, construction signage, and other traffic control information will be included in a Transportation Management Plan that will be implemented during the construction phase. It is expected that one lane in each direction will be maintained for traffic access during the day at those locations where roadway capacity permits. [The following text has been updated since the draft environmental document was circulated.] Any full closures or reversible one-lane direction control to be used, for example, at locations with only one lane in each direction, and/or where on and off-ramps require closure, will take place during the evening and overnight hours when traffic levels are lowest. In addition, night work may be necessary to mobilize equipment at the six locations where trenchless methods will be used. Based on preliminary plans, construction work during the nighttime is anticipated during the majority of project construction, or about 120 days of the total 165-day construction period. This estimate will be refined during the Construction phase of the project. Lane closures will be implemented per Caltrans' lane closure charts to be included in the construction contract specifications.

The public will be notified of planned construction traffic management strategies through various methods as part of a public awareness campaign and motorist information on the project route. The public awareness campaign may include strategies such as press releases and media alerts, advertisements, Caltrans websites, and other highway traffic-related internet applications, and/or a telephone hotline. Traveling motorist information may include tools, such as on-highway and local street changeable message signs, construction area signs, and radio advisories.

1.4.2 No-Build (No-Action) Alternative

The No-Build Alternative will not repair or replace damaged and degraded drainage culverts within the project limits of State Route 68, will not repair the outdated traffic lighting system equipment, and will not provide traffic monitoring (census) stations. Therefore, this alternative will not address the need to prevent future embankment failure and erosion at the culvert locations, will not upgrade the existing outdated lighting system, which could cause traffic sight distance issues, and will not improve traffic monitoring that will help inform future congestion relief projects.

1.5 Identification of a Preferred Alternative

[Section 1.5 Identification of a Preferred Alternative has been added since the draft environmental document was circulated.] A Build Alternative and a No-Build Alternative were considered for the project. After public circulation of the draft Initial Study with Proposed Mitigated Negative Declaration, a Caltrans Project Development Team reviewed both alternatives and identified the Build Alternative as

the preferred alternative. Identification of the preferred alternative was based on consideration of the project's purpose and need, its effects on the environmental resources and off-site properties and schedule and construction methods. The Build Alternative was determined as the preferred approach to address the project's purpose and need by remediating aging and failing drainage infrastructure and lighting equipment and providing traffic census equipment within the project portion of the State Route 68 corridor. Although the Build Alternative will result in minimal permanent impacts to habitats for sensitive biological resources and temporary disturbances to environmental resources during construction, with the implementation of prescribed mitigation measures and avoidance and minimization measures, the project is not expected to cause significant permanent impacts on environmental resources.

1.6 Alternatives Considered but Eliminated from Further Discussion

The Caltrans Project Development Team originally considered repairs to a total of 34 culverts within the State Route 68 project limits during the initial phase of project development in 2018. [The following sentence has been updated since the draft environmental document was circulated.] Since then, two of the identified culverts, at post mile 1.72 and post mile 10.89, were repaired or upgraded as part of other Caltrans highway projects on State Route 68; therefore, those two locations have been removed from the project. The culvert system at post mile 1.23, which has three culverts, was determined to be a duplicate of the culvert at post mile 1.25 on the initial list.

The culvert at post mile 2.19 was removed from the project before the draft Initial Study with Proposed Mitigated Negative Declaration because the Project Design Team determined that the culvert's inlet and/or outlet structures are outside of the state highway right-of-way and are, therefore, the responsibility of another entity to repair and maintain.

Lighting improvements at the Toro County Park interchange at post mile 15.86 that were also proposed in the initial project design phase have been removed from the scope of work for the project and may potentially be included in a future project for State Route 68.

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

As part of Caltrans' standard procedures, Environmentally Sensitive Areas will be delineated on project construction plans to protect and minimize disturbance from construction activities on vegetation and sensitive habitat types within the project's physical impact areas. Temporary fencing and Environmentally Sensitive Areas will be installed before construction to mark the sensitive resource areas to be protected. However, the removal of shrubs and trees and vegetation trimming will be necessary

in certain culvert construction areas where access/haul roads are necessary for construction vehicles and equipment. Replacement of permanent and temporary impacts to trees and other vegetation will be conducted as part of the project mitigation requirements addressed in Chapter 2.

Construction activities will primarily include the removal and replacement of portions of the culvert pipes and improvements to culvert inlets and outlets, including slope stabilization and backfilling. Best Management Practices and other Caltrans standard procedures will be implemented for control of stormwater and soil erosion and protection of water quality, both during temporary construction activities and for permanent postconstruction conditions. Disturbed areas will be treated with erosion control materials best suited to the project site conditions. Steeper areas exposed to concentrated runoff flows from the highway culverts will receive aggressive erosion control techniques such as netting, fiber rolls, compost socks, and hydroseeding to establish vegetation for long-term minimization of soil erosion.

Caltrans has developed standard measures, standard special provisions, and Best Management Practices that are implemented on all or most Caltrans projects. The following list is relevant to the project:

- **7-1.02A General:** The contractor will comply with laws, regulations, orders, and decrees applicable to the project.
- **7-1.02C Emissions Reduction:** The contractor will submit a certification acknowledging compliance with emissions reduction regulations managed by the California Air Resources Board.
- **7-1.02M(2) Fire Protection:** Includes the development of a fire prevention plan, which will minimize the risk of starting a wildfire during construction.
- **13-2 Water Pollution Control Program:** This section provides specifications for the development and implementation of a Water Pollution Control Program.
- **13-4 Job Site Management:** This section includes specifications for performing job site management work such as spill prevention and control, material management, waste management, non-stormwater management, and dewatering activities.
- **13-5 Temporary Soil Stabilization:** This section includes specifications for placing temporary soil stabilization materials on stockpiles or disturbed soil areas.
- **13-6 Temporary Sediment Control:** This section covers specifications for installing temporary sediment controls, such as check dams and drainage inlet protections.
- **13-9 Temporary Concrete Washouts:** This section covers specifications for installing temporary concrete washouts to receive and dispose of concrete waste.

- **13-10 Temporary Linear Sediment Barriers:** This section covers specifications for installing temporary linear barriers to control sediment, like high-visibility fencing, fiber rolls, and temporary large sediment barriers.
- **14-1.02 Environmentally Sensitive Area:** Caltrans will mark areas that are environmentally sensitive. These areas cannot be entered unless authorized. If an Environmentally Sensitive Area is breached, work near the area will stop immediately, and the resident engineer will be notified.
- **14-2.03 Archaeological Resources:** If archaeological resources are discovered within or near the construction limits, the resources will not be further disturbed, and all work near the discovery will stop immediately. The area will be secured, and the resident engineer notified.
- **14-6.03 Species Protection:** This specification includes instructions for the protection of regulated species and their associated habitat, including migratory and nongame birds. If a protected species is discovered, work will stop near the discovery, and the engineer will be notified so that Caltrans biologists could investigate the discovery and take appropriate action.
- **14-7.03 Discovery of Unanticipated Paleontological Resources:** If unanticipated paleontological resources are discovered, the resources will not be further disturbed, and all work near the discovery will stop immediately. The area will be secured, and the resident engineer notified.
- **14-8.02 Noise Control:** Noise from work activities will be controlled and monitored. Noise will not exceed 86 decibels at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.
- **14-9.02 Air Pollution Control:** The project will comply with applicable air pollution control rules, regulations, ordinances, and statutes.
- **14-10.02: Solid Waste Disposal and Recycling Report:** The types and amounts of solid waste taken to or diverted from landfills or reused on the project will be tracked and reported on each calendar year.
- **14-11.03 Hazardous Waste Management:** This specification outlines the procedures for the handling, storage, transport, and disposal of hazardous waste, which will comply with 22 California Code of Regulations Division 4.5.
- **14-11.04 Dust Control:** Excavation, transportation, and handling of material containing hazardous waste or contamination must result in no visible dust migration. When clearing, grubbing, and performing earthwork operations in areas containing hazardous waste or contamination, a water truck or tank will be provided on the job site.
- **14-11-06: Contractor-Generated Hazardous Waste:** This specification provides instructions to the contractor for the management of hazardous wastes that may be generated during construction, such as petroleum materials, paints, stains, and wood preservatives. Instructions for the management of contaminated soils that may be created due to accidental leaks or spills are also included.
- **14-11.08 For Regulated Material Containing Aerially Deposited Lead**

- **14-11.09 For Minimal Disturbance of Regulated Material Containing Aerially Deposited Lead**
- **14-11.12 Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue:** Includes specifications for removing, handling, and disposing of yellow thermoplastic and yellow-painted traffic stripe and pavement marking. The residue from the removal of this material is a generated hazardous waste (lead chromate). Removal of existing yellow thermoplastic and yellow-painted traffic stripe and pavement marking exposes workers to health hazards that must be addressed in a lead compliance plan.
- **14-11.13C Safety and Health Protection Measures:** Applies to worker protective measures for potential lead exposure.
- **Standard Special Provision 14-11.14 Treated Wood Waste:** Required to assess handling and disposal of any potential wood waste generated during the project.
- **84-9.03C Remove Traffic Stripes and Pavement Markings Containing Lead:** This specification includes instructions for the removal of yellow traffic stripe if the stripe will be removed using a cold plane or grinding operation.
- **Standard Special Provision 7-1.02K(6)(j)(iii):** Earth Material Containing Lead.
- **Standard Special Provision 36-4:** For work involving residue from grinding and cold planing that contains lead from paint and thermoplastic.
- **Transportation Management Plan:** A standard measure implemented on every Caltrans project that prescribes specific lane closures, detour routes, public information programs, and other procedures to manage traffic flow through project work areas during construction periods. See also Section 1.4.1, Build Alternatives, for additional information.

1.8 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. [The following sentence has been updated since the draft environmental document was circulated.] 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).

1.9 Permits and Approvals Needed

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

Table 1.2 Permits and Approvals Needed

Agency	Permit/Approval	Status
Monterey County Housing and Community Development	Coastal Development Permit	A request for consolidation of a permit application under the California Coastal Commission jurisdiction will be submitted during the project's Plans, Specifications, and Estimates phase.
California Coastal Commission	Coastal Development Permit	Formal application to be submitted during the Plans, Specifications, and Estimates phase.
City of Pacific Grove	Coastal Development Permit	A request for consolidation of a permit application under the California Coastal Commission jurisdiction will be submitted during the project's Plans, Specifications, and Estimates phase.
Monterey County Public Works	Permit to Encroach (for construction within the county right-of-way)	To be requested during the Plans, Specifications, and Estimates phase.
Monterey County Public Works	Temporary Construction Easements	To be requested during the Plans, Specifications, and Estimates phase.
Monterey County Public Works	Drainage easements for construction and permanent maintenance access (for culverts outside of Caltrans' right-of-way)	Formal agreements will be drafted during the Plans, Specifications, and Estimates phase.
Local Landowners	Permit to Enter and Construct (for permanent infrastructure improvements)	Formal agreements will be drafted during the Plans, Specifications, and Estimates phase.
Local Landowners	Temporary Construction Easements	Formal agreements will be drafted during the Plans, Specifications, and Estimates phase.
U.S. Army Corps of Engineers	Clean Water Act Section 404 Permit	A notification will be submitted during the Plans, Specifications, and Estimates phase.
California Department of Fish and Wildlife	2081 Incidental Take Permit for California tiger salamander	An application will be submitted during the Plans, Specifications, and Estimates phase.
California Department of Fish and Wildlife	1602 Streambed Alteration Agreement	A notification will be submitted during the Plans, Specifications, and Estimates phase.

Agency	Permit/Approval	Status
Regional Water Quality Control Board	Clean Water Act Section 401 Water Quality Certification	An application will be submitted during the Plans, Specifications, and Estimates phase.
U.S. Fish and Wildlife Service	Federal Endangered Species Act Section 7 Consultation and Programmatic Biological Opinion for the California Red-Legged Frog	[The following text has been updated since the draft environmental document was circulated.] Section 7 consultation concluded with a receipt of the Biological Opinion on May 23, 2022.
U.S. Fish and Wildlife Service	Federal Endangered Species Act Section 7 Consultation and Biological Opinion for the California Tiger Salamander	[The following text has been updated since the draft environmental document was circulated.] Section 7 consultation concluded with a receipt of the Biological Opinion on May 23, 2022.

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the 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 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 of the planned drainage improvements on State Route 68 dated September 22, 2021, 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 non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, will 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 will adversely affect day or nighttime views in the area?	**No Impact**

Affected Environment

State Route 68 is an Officially Designated Scenic Highway from post miles L4.3 to R17.8, overlapping State Route 1 and east to the Salinas River. State Route 68 is an Eligible Scenic Highway from post mile 0.0 to post mile L4.26, from the City of Monterey to State Route 1. The Scenic Highway designation is based on the rural character and lack of urbanization or other dense development along the route corridor. Suburban and rural development is present along the route but largely screened from the highway by roadside vegetation, particularly forested areas and landforms.

Views along the project route limits include forested edges of the highway and tree-framed views of Monterey Bay. In the westerly portion of the project on the Monterey Peninsula from the City of Pacific Grove to State Route 1, suburban and rural residential and localized commercial developments are interspersed with Monterey pine and cypress forest. To the east of State Route 1 along the Monterey-Salinas Highway portion, views include open space, rolling oak-covered hills in the distance, and natural vegetative patterns, including coastal scrub, coast live oak woodland, mixed chaparral, and grasslands.

The project area has high viewer sensitivity for the scenic qualities described above. The western portion of the highway is partially within the coastal zone. Development and infrastructure projects within the coastal zone must adhere to specific policies and provisions of the Local Coastal Programs adopted by the County of Monterey and the Cities of Pacific Grove and Monterey for purposes of protection and maintenance of coastal resources; among which are scenic viewsheds and environmentally sensitive habitats.

Environmental Consequences

The planned drainage structures will mostly be below the elevation of the highway and will not block views of the surrounding scenic vistas. The project area has

overhead utilities, signage, lighting, and other roadside elements. Staining any visible drainage structures that the project will construct will minimize any effects on the topographic and vegetative elements of the area's scenic vistas, which will remain visible. Therefore, the project will not have a substantial adverse effect on the scenic vistas in the project area.

The planned trenchless and cut-and-cover construction methods for replacing and repairing aging and defective pipes and other infrastructure will necessitate the removal of individual trees and other vegetation at selected culvert locations. The areas of vegetation removal are generally in densely vegetated locations. With the removal of only the minimum amount of vegetation required and protection of vegetation next to the work areas, as well as revegetation of the project work areas after construction, the project will not substantially damage scenic resources in the project area as viewed from the project route as a Scenic Highway.

The visual setting of the project area is characterized by rural and undeveloped landscapes, with locational suburban enclaves amongst forest, open grasslands, and scrub vegetation in rolling hills and rock formation topographies. The infrastructural components of the planned culverts, census stations, and lighting will be mostly underground with some visible elements, such as replaced drainage inlets and outlet structures, replaced guardrail at one culvert area, and added rock slope protection. These types of elements are not uncommon in the project area and will be expected; however, the combination of some expanded and new elements will generate an incremental increase of a utilitarian appearance with a further degree of visual clutter to the setting.

Several of the culvert work areas will necessitate the removal of individual trees and other vegetation in the immediate area, which will cause a minor reduction of the rural character and visual quality within the project limits at the individual work area locations and collectively along the project route. The measures prescribed below will minimize these incremental and cumulative effects on the visual character and quality of public views of the project and the surrounding area.

The planned lighting system improvements at post mile R4.04 near Fairground Road will refurbish existing lighting equipment and add two additional electroliers along the northbound off-ramp of State Route 68 to the Fairground Road overcrossing. One existing double-arm electrolier near the converging point of the off-ramp will be removed. New underground conduit systems, conductors, pull boxes, and service connection cabinets to support the electrical lighting equipment will be installed.

Because this location currently has lighting, the planned additional equipment and replacement elements will not create new sources of substantial light or glare, adversely affecting nighttime views from public areas such as the Toro County Park, State Route 68, or other area roadways.

Avoidance, Minimization, and/or Mitigation Measures

Although the planned improvements will not cause significant aesthetic impacts to the project environment, the following minimization measures will reduce the project's effects on aesthetic and visual resources along State Route 68.

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: All disturbed areas will be revegetated with native plant species appropriate to each specific work location.

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

VIS-4: 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 will be determined by the Caltrans District 5 Landscape Architecture Program.

VIS-5: All visible metal components related to down drains 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 will be determined by the Caltrans District 5 Landscape Architecture Program.

VIS-6: All visible rock slope protection should be placed in natural-appearing shapes rather than in geometric patterns to the greatest extent possible to reduce its engineered appearance.

VIS-7: Following placement of rock slope protection, the visible rock should be colored to blend with the surroundings and reduce reflectivity. The specific color will be determined by the Caltrans District 5 Landscape Architecture Program.

VIS-8: Metal roadside elements, including but not limited to guardrail, guardrail transitions, and end treatments, should be stained or darkened to be visually compatible with the rural setting. The color will be determined and approved by the Caltrans District 5 Landscape Architecture Program.

VIS-9: Following construction, all new construction staging areas and other temporary uses will be regraded and recontoured as necessary to match the surrounding pre-project topography.

2.1.2 Agriculture and Forest Resources

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

Based on information from the California Department of Conservation, Farmland Mapping and Monitoring Program, the County of Monterey Geographic Information System's online mapping, land use, and zoning maps for the County of Monterey and City of Monterey, and the California Department of Forestry and Fire Protection's Hub online tool, there are no properties in operation or production for agricultural or timber products or zoned for agriculture, or timber production uses next to the project limits. In addition, there are no agricultural lands that are Prime or Unique Farmland or Farmland of Statewide Importance, or any lands under Williamson Act contracts within or immediately next to the project limits. The nearest Williamson Act properties are about 0.75 mile to the north on the east side of State Route 68 and will not be affected by construction activities of the planned culvert replacement at post mile 15.65, the easternmost limits of the project. The improvements will not permanently convert or otherwise affect any farmland properties or otherwise affect the existing functions of nearby agricultural lands or conflict with any existing zoning for agricultural uses or Williamson Act contracts.

In the western segment of the project limits, from post mile 0.2 to State Route 1 at post mile L4.15, both sides of State Route 68 have rural-to-low-density residential development set back from the highway, and institutional uses, such as the Community Hospital of the Monterey Peninsula, the Presidio of Monterey, and light commercial uses. Native Monterey pines, oaks, and understory growth align portions of the highway edge, and there are open space reserves to the west, including the Samuel F.B. Morse Botanical Reserve and the Del Monte Forest. These open space areas will not be affected by the planned infrastructural highway improvements.

The project will impact individual trees at select locations within the project culvert work areas, as discussed in Section 2.1.4, Biological Resources. Trees that are required to be removed will be replaced as outlined in the mitigation measures provided in Section 2.1.4, Biological Resources. These individual tree impacts will not affect or convert any zoned areas of timber or forest land as defined in the referenced government code sections provided in Section C of the table below.

In the eastern segment of the project limits from State Route 1 to Toro County Park (post mile R4.4 to post mile 15.7), there are areas of tree and other natural vegetation and a jurisdictional resource reservoir/pond at Culvert Location 24 (post mile 10.56). There are no properties zoned for agricultural or timber production. State Route 68 traverses through industrial uses (Monterey Airport), recreational/open space uses (including golf courses, the Monterey County Fairgrounds, WeatherTech Raceway Laguna Seca, Toro County Park), rural-to-low-density residential development, and the Fort Ord National Monument property and open space.

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

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

2.1.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make determinations regarding potential air quality impacts. Considering the information in

the Air Quality, Greenhouse Gas, Noise, and Water Quality Technical Memorandum dated August 10, 2021, the following significance determinations have been made:

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

Affected Environment

The project is in the North Central Coast Air Basin (Basin), which includes the Counties of Monterey, San Benito, and Santa Cruz. Air quality in the Basin is regulated by the Monterey Bay Air Resources District. The Basin is in attainment for all National Ambient Air Quality Standards and non-attainment transitional for California Ambient Air Quality Standards for ozone. The Basin is in non-attainment for airborne particulate matter less than 10 microns in diameter (PM10).

Environmental Consequences

The project will not increase the capacity of State Route 68; therefore, there will be no change in long-term air quality in either the local or regional study areas. Therefore, the planned culvert and other infrastructural improvements will not conflict with the implementation of the Monterey Bay Air Resources District's Air Quality Management Plan (2012-2015) for the Basin.

Short-term temporary increases in air emissions and fugitive dust are expected during construction activities. It is expected that there will be minor earthwork, such as excavation, soil transport, and fill at the individual locations for culvert replacement and/or repair, and installation of census station and lighting infrastructure within the project limits. Residential uses and health care facilities in the vicinity of the project route could be considered sensitive receptors to increased emissions and dust generated during project construction. [The following sentence has been updated since the draft environmental document was circulated.] These increases will be minimized through the implementation of standard construction practices and procedures for dust and emission minimization, as provided in Section

1.7, Standard Measures and Best Management Practices Included in All Build Alternatives. It is expected that project emissions from construction vehicles and equipment and particulate matter (dust) will be well within the Monterey Bay Air Resources District's standards. Project construction activities are not expected to generate a substantial odor.

Construction emissions were calculated for the project using the Caltrans Construction Emissions Tool with settings for a stormwater and drainage project of a 150-day construction period. Based on preliminary design information, the project construction activities are estimated to generate an average of 179 tons per year of carbon dioxide or 150 tons of carbon dioxide equivalent during the construction period.

The project will incorporate appropriate standard engineering design and Best Management Practices for stormwater protection and control during construction activities. In accordance with Caltrans' 2018 Standard Specifications, the contractor will be responsible for compliance with all local air pollution control rules, regulations, ordinances, and statutes for work conducted under the construction contract. These requirements include those provided in Government Code Section 11017 (Public Contract Code Section 10231). In addition, the contractor will be required to prepare a Stormwater Pollution Prevention Control Plan to address water pollution control measures, which also correlate with minimization of dust generation from grading, stockpiling, excavating, and other anticipated construction activities.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed.

2.1.4 Biological Resources

Considering the information in the Natural Environment Study dated December 20, 2021, 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 with Mitigation Incorporated**

Question—Would the project:	CEQA Significance Determinations for Biological Resources
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	**Less Than Significant Impact with Mitigation Incorporated**
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	**Less Than Significant Impact with Mitigation Incorporated**
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?	**No Impact**

Affected Environment

A Biological Study Area was determined for each of the planned culvert and Transportation Management System improvement locations. [The following sentence has been updated since the draft environmental document was circulated.] The Biological Study Areas include the expected construction work areas, any associated access roads and staging areas, and nearby potential habitat areas. Therefore, the Biological Study Areas are somewhat larger than the anticipated construction footprint to ensure the evaluation of all potential effects on the biological resources at those locations. The collective study areas within the entire project limits along State Route 68 are referred to as the Biological Study Area of the project.

The types of habitat in the project's Biological Study Area include a variety of native coastal and inland plant communities and developed, landscaped, and ruderal/disturbed areas. Monterey pine forest and woodland habitat are dominated by Monterey pine *(Pinus radiata)* trees as a forest canopy in the coastal portion of the project in the Monterey Peninsula area. Coast live oak woodland and forest is dominated by coast live oak *(Quercus agrifolia)*, which is the most common plant community in the Biological Study Area. Other native habitat types include seasonal

wetlands, willow thickets, wild oats – annual brome grasslands, and coyote brush scrub. Also within the Biological Study Area are several types of designated Environmentally Sensitive Habitat Areas: Wetland, Riparian, and Coastal Stream Environmentally Sensitive Habitat Areas.

Environmental Consequences

Potential project impact areas were determined from the preliminary design plans during the Project Approval and Environmental Document phase of project development. A subset area, referred to as the Area of Potential Impacts, within the larger Biological Study Area of the entire project was estimated for each of the project culverts, lighting, and census station improvement locations. The Areas of Potential Impacts were used to determine potential direct and indirect (proximate) physical effects on biological resources.

The project will cause permanent impacts to biological resources in the Area of Potential Impacts from the replacement of existing culverts with culvert infrastructure (pipes, boxes, other types) that are longer than the existing pipes, the addition of flared end sections to inlets and outlets at various locations, headwalls, and placement of new rock slope protection.

Temporary impacts will occur from the creation and use of construction equipment, vehicle staging areas, dirt access roads to culvert work sites, and vegetation trimming and removal. Impacts will also occur from temporary stream diversion and dewatering to minimize water quality impacts while replacing culverts and constructing rock slope protection. Sources of impacts will be from construction equipment activities and worker foot traffic. The following discussions address potential impacts of the project upon specific categories of biological resources in the project Biological Study Area.

Sensitive and Special-Status Species

Three special-status plant species were seen during biological field surveys of the project Biological Study Area. Hooker's manzanita *(Arctostaphylos hookeri)* and sandmat manzanita *(Arctostaphylos pumila)* were found outside of the project limits of work (Area of Potential Impact). Impacts to plants of those species will be avoided through the implementation of Avoidance and Minimization Measure BIO-20, which implements the installation of temporary high visibility fencing to mark Environmentally Sensitive Areas relevant to these plant species.

Monterey pine *(Pinus radiata)* is a special-status plant species in Monterey County, with a California Rare Plant Rank of 1B.1, meaning it is rare, threatened, or endangered in California and elsewhere and/or seriously endangered in California with a high degree of immediacy of threat. The project will directly impact (through removal) an estimated total of 17 Monterey pine trees based on the preliminary design for construction work at several of the culvert construction locations. Most of the removed pines will be in the coastal zone sections of the project west of State Route 1.

Compensatory mitigation is proposed for the replacement of all removed Monterey pines onsite (within the state highway right-of-way and in the temporary construction easements) and includes planting more trees than are removed to achieve no net loss of trees. Replacement plantings are proposed at varying ratios depending on their size and/or location. In non-jurisdictional areas, pines will be replanted at a 1-to-1 ratio; in jurisdictional areas, pines will be replaced at a 3-to-1 ratio if they are less than 24 inches in diameter at breast height or at a 10-to-1 ratio for pine trees that are 24 inches or larger in diameter at breast height. The replanting details will be included in the Landscape Planting Plans prepared during the Design (Plans, Specifications, and Estimates) phase of the project.

All Monterey pines that remain in the vicinity of the project work areas will be delineated in design plans. Before ground-disturbing construction activities, temporary Environmentally Sensitive Area fencing will be installed to protect the remaining pines at the affected locations. Refer to Measures BIO-14 through BIO-16.

The project will directly impact Yadon's piperia *(Piperia yadonii)* critical habitat, with permanent impacts of approximately 0.024 acre (324 square feet) and temporary impacts of about 0.636 acre (27,739 square feet), or 0.0008 percent of the 810-acre critical habitat unit area. Yadon's piperia is a perennial herb listed as federally endangered with designated critical habitat and with a California Rare Plant Rank of 1B.1, highly imperiled in California and elsewhere. Habitat types where Yadon's piperia is found include coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral.

Critical habitat for Yadon's piperia occurs within or next to the Biological Study Area at Culvert Locations 4, 6, 7, 8, 9, and 10. The areas within the critical habitat that will be impacted by the project are of low quality (also described as ruderal/disturbed) at the edges of the critical habitat area and not occupied by the plant species in accordance with observations made during the biological field surveys conducted in 2020 and 2021.

[The following text has been updated since the draft environmental document was circulated.] Based on the above information, Caltrans made two determinations of effect—one determination for the species and one determination for the critical habitat—in the biological impact analysis for Yadon's piperia in accordance with Section 7 of the Federal Endangered Species Act. A determination was made that the project will have no effect on Yadon's piperia due to the absence of the species from the project areas and lack of suitable habitat. Regarding the critical habitat, Caltrans concluded that the project may affect and is likely to adversely affect Yadon's piperia designated critical habitat because there will be a small amount of permanent disturbance and temporary construction access within the designated critical habitat area. Since the public circulation of the draft environmental document, Caltrans received the Biological Opinion on the project from the U.S. Fish and Wildlife Service regarding its effects on the federally threatened California red-legged frog and California tiger salamander, and Yadon's piperia, as part of formal

consultation in accordance with Section 7 of the federal Endangered Species Act. The Biological Opinion, issued May 23, 2022, concluded that the project may affect but not likely to adversely affect Yadon's piperia and its critical habitat, contingent on implementation of the measures prescribed herein for Yadon's piperia. The Biological Opinion is included in Volume 2 of this Initial Study with Mitigated Negative Declaration.

[The following text has been updated since the draft environmental document was circulated.] Avoidance and minimization measures for all project disturbance areas, including those within Yadon's piperia critical habitat, include revegetation of disturbed areas with native plant species and both plantings and seeding, as prescribed in measures VIS-2 and VIS-3 in Section 2.1.1 Aesthetics, and as referenced in Section 1.7, Standard Measures and Best Management Practices Included in All Build Alternatives. In addition, avoidance and minimization measures BIO-10 and BIO-11 will implement personnel training and biological monitoring alerts for sensitive species during construction.

Compensatory mitigation for the temporarily impacted areas of the project within the critical habitat of Yadon's piperia that are also within jurisdictional areas will consist of replanting the areas with native vegetation, including appropriate native tree and understory plant species as included in the mitigation for jurisdictional waters and wetlands (Mitigation Measure BIO-1). A three-year plant establishment period will be implemented to ensure success at Culvert Locations 6 (post mile 2.20), 8 (post mile 2.73), and 9 (post mile 2.80).

A determination of no effect under the Federal Endangered Species Act was made for eight other federally listed plant species and multiple bird, fish, mammal, and insect species due to a lack of suitable habitat in the Biological Study Area for those species, as specified in the Natural Environment Study.

[The following text has been updated since the draft environmental document was circulated.] It was determined that the project may affect and is likely to adversely affect the California red-legged frog *(Rana draytonii)* under Section 7 of the Federal Endangered Species Act. Project construction activities could result in injury or mortality to California red-legged frogs if present during stream diversion and dewatering. Erosion and sedimentation of the streams from construction disturbance (via foot traffic or equipment) could directly or indirectly affect water quality. The likelihood of these potential impacts is low because the species was not seen during field surveys; however, the presence of the species could change over time. The Biological Opinion issued by the U.S. Fish and Wildlife Service concurred with Caltrans' determination that the project may affect and is likely to adversely affect California red-legged frog, and that the project meets the criteria to work under the Programmatic Biological Opinion with implementation of the measures contained therein.

Caltrans expects that the project will qualify for Federal Endangered Species Act Incidental Take Coverage under the Programmatic Biological Opinion for Projects

Funded or Approved under the Federal Highway Administration's Federal Aid Program (U.S. Fish and Wildlife Service 2011). The Programmatic Biological Opinion includes measures designed to avoid or minimize impacts to California red-legged frogs. These measures are included in Avoidance and Minimization Measures BIO-21 through BIO-34.

Suitable habitat for the California tiger salamander *(Ambystoma californiense)* occurs in some of the culvert locations in the easterly portion of the project limits, with two known breeding ponds within 1.24 miles of Culvert Location 25 (post mile 13.84) and Locations 26A and B (post mile 15.65). In addition, there are numerous ponds within 1.25 miles of Culvert Locations 14A through 26 that currently have undetermined occupancy by California tiger salamanders.

[The following text has been updated since the draft environmental document was circulated.] Caltrans determined that the project may affect and is likely to adversely affect the California tiger salamander under Section 7 of the Federal Endangered Species Act. The Biological Opinion issued by the U.S. Fish and Wildlife Service concurred with this determination. The determination is based on the potential for injury or mortality impacts from construction activities if dewatering or stream diversion is necessary, or activities during the breeding season or dispersal during rain events (November to May) and the breeding season (May to June) when individuals are out of their burrows. The project will permanently impact about 0.006 acre (311 square feet) and temporarily impact up to about 2.378 acres of potential upland habitat for the California tiger salamander.

In addition, at Culvert Location 24 (post mile 10.56), the project will potentially temporarily impact about 0.049 acre of potential breeding habitat during construction, resulting in a total of about 2.427 acres of temporary impacts to California tiger salamander habitat. No permanent impacts to California tiger salamander breeding habitat will be caused by the project.

Compensatory mitigation will be implemented to replace the impacted habitat for the California tiger salamander, as specified in Mitigation Measure BIO-35. The proposed mitigation includes the provision of permanent habitat protection and management of up to 0.018 acre of potential upland habitat (up to a 3-to-1 compensatory mitigation ratio for 0.006 acre of permanent impacts) and up to 2.427 acres of potential upland and breeding habitat (up to a 1-to-1 compensatory mitigation ratio for 2.427 acres of temporary impacts), resulting in an expected compensatory mitigation lands total of 2.445 acres.

In addition, implementation of Avoidance and Minimization Measures BIO-36 through 43 will minimize or avoid potential additional impacts to California tiger salamander upland and breeding habitats. In accordance with the regulations of the California Endangered Species Act, there may be take of California tiger salamanders as a result of the project, and a 2081 Incidental Take Permit will be pursued with the California Department of Fish and Wildlife. There will be no take of any other listed species under the California Endangered Species Act.

The Biological Study Area contains suitable habitat for three Species of Special Concern (under the jurisdiction of the California Department of Fish and Wildlife) that are found in aquatic habitat types similar to the California red-legged frog. These species include the coast range newt *(Taricha torosa torosa),* western spadefoot (toad) *(Spea hammondii),* and the western pond turtle *(Emys marmorata).* Project construction work in wet areas such as streams and wetlands could potentially directly or indirectly impact individuals of these species or their aquatic environments described above. Compensatory mitigation that is prescribed for project impacts to jurisdictional wetlands and other waters will also compensate for these three species. Implementation of compensatory mitigation, as well as additional measures to avoid or minimize potential impacts (BIO-44 through 46), will reduce potential adverse impacts to these special-status species to below the level of significance.

Suitable habitat also exists in the project Biological Study Area for several other California Department of Fish and Wildlife Species of Special Concern, including the California legless lizard *(Anniella pulchra)* (potential habitat near Culvert Locations 20, 21, 22), American badger *(Taxidea taxus)* (potential habitat near Culvert Locations 25 and 26B) and the Monterey dusky-footed woodrat (*Neotoma fuscipes luciana*) (potential habitat near Culvert Locations 19 and 23).

Vegetation removal, worker foot traffic, and other construction activities could directly or indirectly impact these species if they are found in or near the project work areas. Implementation of avoidance and minimization measures specific to the needs of each species and their potential locations within the project study areas will reduce potential adverse impacts to these species to below significance. Refer to Avoidance and Minimization Measures BIO-47 through 49.

The tricolored blackbird *(Agelaius tricolor)* was seen foraging near Culvert Location 24 at post mile 10.56 during biological field surveys for the project. The tricolored blackbird is listed as a threatened species projected by the California Endangered Species Act. The determination under the California Endangered Species Act for the Tricolored blackbird is that the project will not result in take of the species. Avoidance and minimization measures will be implemented to protect the Tricolored blackbird and all nesting bird species that are protected by the Migratory Bird Treaty Act, the California Fish and Game Code, the Federal Endangered Species Act, and the California Endangered Species Act (refer to Measures BIO-50 through 52).

Migratory Birds

The project will remove trees and other vegetation as part of the construction work for some of the culvert locations. Direct impacts to active bird nests and eggs or young birds could occur, as well as indirect impacts to nesting, foraging, or perching behaviors from construction noise and disturbance from equipment and workers. Measures BIO-53 and BIO-54 will be implemented to avoid impacts to nesting migratory bird species.

Implementation of prescribed compensatory mitigation measures and avoidance and minimization measures will reduce the project's potentially significant adverse

impacts upon candidate, sensitive or special-status species to below a level of significance.

Sensitive Natural Communities

Table 2.1 provides a summary of the project's impacts on natural communities and critical habitats.

The following information pertains to Table 2.1:

- The U.S. Army Corps of Engineers' jurisdictional other waters of the U.S. lack one or more of the three wetland indicators (i.e., wetland vegetation, hydric soils, and/or wetland hydrology) and extend from the thalweg (the lowest point of a channel) up to the ordinary high water mark. For the purposes of the Natural Environment Study, the U.S. Army Corps of Engineers' jurisdictional other waters are equivalent to the areas characterized as all areas below the ordinary high water mark (ephemeral stream and intermittent stream, lakes). Three-parameter wetlands are also subject to U.S. Army Corps of Engineers' jurisdiction.
- The Regional Water Quality Control Board jurisdiction includes the U.S. Army Corps of Engineers' jurisdictional other waters of the U.S. and the area above the ordinary high water mark to the top of the bank or to the edge of riparian vegetation. Woody riparian areas are distinguished from herbaceous bank areas.
- California Department of Fish and Wildlife jurisdiction extends from the channel bed to the top of banks or outer edge of riparian canopy (whichever is greater). Includes/overlaps areas of U.S. Army Corps of Engineers' jurisdictional other waters and extends above the ordinary high water mark to the top of the bank or outer edge of riparian vegetation, whichever is greater. California Department of Fish and Wildlife jurisdiction includes wetlands when they are within lakes, streams, and riparian areas.
- Coastal Environmentally Sensitive Habitat Areas are included in the totals for U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife jurisdiction totals.

Table 2.1 Impacts to Natural Communities and Critical Habitat

Community/Habitat	Permanent Impacts (Acres)	Permanent Impacts (Square Feet)	Temporary Impacts (Acres)	Temporary Impacts (Square Feet)
Developed	0	0	2.318	10,0975
Ruderal/Disturbed	0.002	107	2.062	90,095
Landscaped	0	0	0.223	9,687
Monterey Pine Forest and Woodland	0.014	721	1.005	43,468
Eucalyptus Forest	0	0	0.012	527
Coast Live Oak Woodland	0	0	1.254	5,495
Coyote Brush Scrub	0.006	311	0.204	8,891
Yadon's Piperia Critical Habitat	0.024	324	0.636	27,739
Streambeds-U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife Jurisdiction	0.014	623	0.063	2,724
Woody Riparian Areas-Regional Water Quality Control Board and California Department of Fish and Wildlife Jurisdiction)	0.012	508	0.449	19,549
Other Streambanks and Lake Banks-Regional Water Quality Control Board and California Department of Fish and Wildlife Jurisdiction	0.002	86	0.039	1,692
In-Stream and In-Lake Wetlands-U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife Jurisdiction	0	0	0.016	699
Environmentally Sensitive Habitat Area 1: Coastal Wetland	0	0	0.001	62
Environmentally Sensitive Habitat Area 2: Riparian	0.002	108	0.012	528
Environmentally Sensitive Habitat Area 3: Coastal Stream	0.003	133	0.004	156

Jurisdictional Aquatic Resources

The project could permanently impact 0.014 acre (623 square feet) of streambed resources and temporarily impact 0.063 acre (2,724 square feet) of the same type of habitat, which is under the regulatory jurisdiction of the U.S. Army Corps of Engineers, the Regional Water Quality Control Board and the California Department of Fish and Wildlife. The project is expected to permanently impact 0.012 acre (508 square feet) of woody riparian habitat—which is under the jurisdiction of the Regional Water Quality Control Board and the California Department of Fish and Wildlife—and temporarily impact 0.449 acre (19,549 square feet) of riparian habitat.

The project will also permanently impact 0.002 acre (86 square feet) of another streambank habitat under the jurisdiction of the Regional Water Quality Control Board and the California Department of Fish and Wildlife and temporarily impact 0.039 acre (1,692 square feet) of other streambank and lake bank habitat. Wetlands under the jurisdiction of the U.S. Army Corps of Engineers and Regional Water Quality Control Board will be impacted temporarily, with 0.015 acre (699 square feet) affected. These wetlands occur in association with streams and lakes and are also subject to California Department of Fish and Wildlife jurisdiction. The project will have permanent and temporary impacts on designated Environmentally Sensitive Habitat Areas, including Coastal Wetland Environmentally Sensitive Habitat Areas, Riparian Environmentally Sensitive Habitat Areas, and Coastal Stream Environmentally Sensitive Habitat Areas, as noted in the table.

Compensatory mitigation will be implemented to prevent a net loss of wetlands, waters, and other aquatic resource acreages, functions, and values. Mitigation components will include revegetation (restoration, reestablishment) and will be included in Caltrans' Landscape Architecture Landscape Planting Plan and the final Mitigation and Monitoring Plan. Refer to Mitigation Measure BIO-1 and Avoidance and Minimization Measures BIO-2 through 9.

Coast Live Oak Woodland

The project will have temporary impacts during construction on 1.254 acres (5,495 square feet) of coast live oak woodland habitat along the project limits, both coastal and inland. [The following sentence has been updated since the draft environmental document was circulated.] About 43 coast live oak trees *(Quercus agrifolia)* will be directly removed among eleven of the 24 culvert work locations. The largest number of oaks, an estimated 23 trees, will be removed at Culvert Location 19 (post mile 6.32) for the construction access roads and two pits (jacking and receiving) for the trenchless repair method planned for that culvert.

Compensatory mitigation will be implemented in the form of replacement plantings of coast live oaks at various ratios depending on whether the oaks to be removed are in jurisdictional or non-jurisdictional areas and depending on the size of the tree trunk diameter. As prescribed in Mitigation Measure BIO-17, oaks that are removed in non-jurisdictional areas will be replaced onsite (within the state highway right-of-way or in the Temporary Construction Easement areas) at a 1-to-1 ratio. Oaks

removed in jurisdictional areas will be replaced at a 3-to-1 ratio. Coast live oak trees that are less than 24 inches in diameter at breast height will be replaced at a 3-to-1 ratio, and oaks that are equal to or larger than 24 inches in diameter at breast height and occur within jurisdictional areas will be replaced at a 10-to-1 ratio. Replacement plantings will be detailed on the project Landscape Planting Plans, with specifications for periodic monitoring after planting.

With the implementation of the mitigation, avoidance, and minimization measures prescribed herein, the project will not have substantial adverse effects on riparian habitat or other sensitive habitat communities identified on regional plans or regulations or as recognized by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. In addition, by implementing mitigation, minimization, and avoidance measures, the project will not substantially adversely affect any state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

Invasive Plant Species

Invasive plants are present at some level in all of the Biological Study Area locations and are often dominant species in some of the plant communities. Project construction activities from equipment, vehicles, foot traffic, and machinery could potentially spread or introduce invasive plant species into the Biological Study Area.

The project could potentially cause an increase in invasive terrestrial species into communities and cause spread into areas not currently dominated by them. Implementation of avoidance and minimization measures to address invasive species (refer to Measures BIO-12 and 13), as well as revegetation plantings, will reduce the abundance and spread of invasive species in the study area.

Wildlife Movement

The western portion of the project limits is within a known wildlife movement corridor between the Monterey coast and the Sierra Azul Range. The project will not substantially disrupt wildlife movement or connectivity as the project will replace or repair existing culverts and traffic management systems; it will not increase the highway capacity or construct any facilities that will change or block wildlife movement in the vicinity of the highway corridor. During construction, streams that carry flow will be maintained by temporary diversion structures, and for those stream locations that carry water into the summer months, project construction will be scheduled to occur during dry months to maintain water quality, as prescribed in Measure BIO-5. Environmentally Sensitive Areas will be protected with the installation of special Environmentally Sensitive Area fencing along the maximum limits of construction disturbance as prescribed in Avoidance and Minimization Measure BIO-4. [The following sentence has been updated since the draft environmental document was circulated.] Special provisions for Environmentally Sensitive Area fencing and sediment barrier fencing will be included in the construction contract and identified in the project plans, specifications, and

estimates. Therefore, the project will not substantially interfere with the movement of any native or migratory fish or wildlife species or with migratory wildlife corridors.

Resource Protection Plans and Ordinances

Most of the western portion of the project on the Monterey Peninsula falls within the coastal zone and the jurisdiction of the Monterey County Local Coastal Program and associated regulations. [The following sentence has been updated since the draft environmental document was circulated.] Caltrans is coordinating with the county to receive a Coastal Development Permit and will implement the final conditions of approval included in the anticipated permit in accordance with the timing required in the condition language (e.g., before the issuance of a coastal development permit from Monterey County).

The project is subject to the requirements of the Del Monte Forest Area Land Use Plan (adopted by Monterey County May 22, 2012, and Local Coastal Plan Amendment in effect June 22, 2012), and the Monterey County *Coastal Implementation Plan Part 5, Regulations for Development in the Del Monte Forest Land Use Plan Area* (Certified by the California Coastal Commission May 9, 2012). Key policies in the Del Monte Forest Land Use Plan are presented in several topical categories for coastal resource protection and maintenance, including freshwater and marine resources, designated Environmentally Sensitive Habitat Areas (e.g., riparian and wetland resources), and forest resources and their associated habitat communities.

As provided in the Del Monte Forest Area Land Use Plan, a Forest Management Plan will be required for projects that remove native trees in the plan area. [The following sentence has been updated since the draft environmental document was circulated.] Caltrans will prepare a revegetation landscape planting plan and maintenance plan that includes recommendations for monitoring, adaptive management, and invasive species abatement as mitigation for removed trees, in addition to a riparian, wetlands, and jurisdictional waters habitat mitigation plan as prescribed in measures included herein. The revegetation mitigation plans will be reviewed for approval by the county as part of the Coastal Development Permit application. Therefore, with the implementation of the measures prescribed herein and the conditions for receipt of a Coastal Development Permit, the project will not conflict with local policies or ordinances that protect biological resources.

As discussed previously, the project limits are partially within the designated critical habitat for Yadon's piperia. With the implementation of the corresponding avoidance, minimization and mitigation measures, the project will not conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plans.

Regulatory Consultations

Caltrans' project biologist requested and received Official Species Lists from the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the California Natural Diversity Database to analyze project impacts. [The following text

has been updated since the draft environmental document was circulated.] A Programmatic Biological Opinion from the U.S. Fish and Wildlife Service was pursued for the California red-legged frog, and a Biological Opinion from the U.S. Fish and Wildlife Service was pursued for the California tiger salamander. A Biological Opinion was issued by the U.S. Fish and Wildlife Service on May 23, 2022. A 2081 Incidental Take Permit has been pursued with the California Department of Fish and Wildlife for the California tiger salamander.

There is no Essential Fish Habitat for federally managed species present at any of the project locations, and consultation with the National Marine Fisheries Service is not required. The project will require a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers, a Clean Water Act Section 401 Water Quality Certification from the Regional Water Quality Control Board, a California Fish and Game Code Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife, and a Coastal Development Permit/Waiver.

Cumulative Impacts

The project will cause temporary habitat disturbance in spot locations in the project limits that could adversely affect the California red-legged frog and the California tiger salamander. The potential for adverse cumulative impacts to these two species and their habitats is estimated to be very low considering the relatively small amount of potential habitat of each that will be affected in relation to the total amount of habitat that occurs in the region. A relatively small amount of habitat take will likely occur. When considered in combination with past, current, and reasonably foreseeable projects in the project cumulative study area, the project is not expected to result in substantial adverse cumulative impacts to California red-legged frog or California tiger salamander. Compensatory mitigation will be implemented as prescribed herein to offset impacts to California red-legged frog and California tiger salamander habitats.

With replacement plantings as compensatory mitigation (Measure BIO-14), the project will not contribute to the cumulative loss of Monterey pine forest or isolated Monterey pine trees. Implementation of Avoidance and Minimization Measure BIO-20 will avoid impacts to the other two special-status plant species—Hooker's manzanita and sandmat manzanita—in the Biological Study Area. Therefore, no adverse cumulative impacts to special-status plant species are expected. Similarly, with replacement planting for oak trees that are to be removed, the project will not have a considerable contribution to the cumulative loss or degradation of oak woodlands or isolated oak trees. In addition, no adverse cumulative impacts to Yadon's piperia critical habitat are expected, as discussed in this section above, under Sensitive and Special-Status Species, because the impacts to the designated critical habitat for this plant will be very minor (0.0008 percent of the critical habitat area) and in previously disturbed areas; impacted areas will be replanted with native vegetation. Further, Avoidance and Minimization Measures BIO-10 and BIO-11 will be implemented to avoid impacts to listed plant species during construction.

The project is not expected to substantially contribute to adverse cumulative impacts to jurisdictional waters and riparian habitat because the project will implement replacement habitat onsite to mitigate in accordance with regulatory permits for loss of jurisdictional waters and riparian habitat.

With the implementation of Avoidance and Minimization Measures BIO 44 through 52 and compensatory mitigation for jurisdictional waters and wetlands (BIO-1), no cumulatively considerable contributions to impacts from the project will occur upon coast range newt, western spadefoot, western pond turtle, two-striped gartersnake, northern California legless lizard, American Badger, Monterey dusky-footed woodrat, Tricolored blackbird, or other nesting bird species. With the implementation of Avoidance and Minimization Measures BIO-12 and BIO-13, no adverse cumulative impacts involving invasive species are expected because the introduction or spread of invasive, non-native plant species will be avoided to the maximum extent feasible.

[The following sentence has been updated since the draft environmental document was circulated.] In addition to the measures in the section below, the Water Pollution Control Program and many of Caltrans' Best Management Practices and standard specifications outlined in Section 1.7, Standard Measures and Best Management Practices Included in All Build Alternatives, will avoid and minimize impacts to biological resources.

Avoidance, Minimization, and/or Mitigation Measures

The measures listed below will reduce potential impacts to biological resources to below significance. Mitigation measures are labeled as such, and the remaining measures are avoidance and/or minimization measures. The measures have been organized by the primary resource or species they are designed to protect.

Jurisdictional Waters/Aquatic Resources

Compensatory Mitigation Measures for Jurisdictional Waters

BIO-1: Restoration (reestablishment) of impacted jurisdictional waters is proposed at a 1-to-1 ratio (acreage) for temporary impacts. Compensatory mitigation is proposed at a 3-to-1 ratio (acreage) for permanent impacts and a 1.5-to-1 ratio (acreage) for degradation impacts (e.g., installation of rock slope protection over gravel filter). Replacement plantings will include appropriate native tree and understory species and will include developed planting specifications and grading plans to ensure the survival of planted vegetation and reestablishment of functions and values. The project will also implement measures required by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the Coastal Development Permits as part of the project permitting process. A three-year plant establishment period, monitoring, semiannual (twice per year) inspections, weeding, and plant replacement, as necessary, will be implemented for Culvert Locations 6 (post mile 2.20), 8 (post mile 2.73), 9 (post mile 2.80), 19 (post mile 6.32), 20 (post mile 9.05) and 23 (post mile 10.29).

Avoidance and Minimization Measures for Jurisdictional Waters

The following avoidance and minimization measures will be implemented to reduce potential project impacts to the U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife, and coastal jurisdictional areas.

BIO-2: Before construction, Caltrans will obtain a Section 404 Nationwide Permit from the U.S. Army Corps of Engineers, a Section 401 Water Quality Certification from the Regional Water Quality Control Board, and a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife. All permit terms and conditions will be incorporated into construction plans and implemented.

BIO-3: Before construction, Caltrans will prepare a Restoration, Mitigation, and Monitoring Plan to document measures to avoid, minimize, and mitigate impacts to vegetation and natural habitats. The Restoration, Mitigation, and Monitoring Plan will be consistent with federal and state regulatory requirements and will be amended with any regulatory permit conditions, as required. [The following sentence has been updated since the draft environmental document was circulated.] Caltrans will implement the Restoration, Mitigation, and Monitoring Plan during construction and immediately following project completion.

BIO-4: Before any ground-disturbing activities, Environmentally Sensitive Area fencing will be installed around jurisdictional waters, and the dripline of trees to be protected within the project limits. Caltrans-defined Environmentally Sensitive Areas will be noted on design plans and delineated in the field before the start of construction activities.

BIO-5: Construction activities in jurisdictional waters and temporary stream diversion will be timed to occur between June 1 and October 31 in any given year, or as otherwise directed by the regulatory agencies, when the surface water is likely to be dry or at a seasonal minimum. Deviations from this work window will only be made with permission from the relevant regulatory agencies.

BIO-6: During construction, all project-related hazardous materials spills within the project site will be cleaned up immediately. Readily accessible spill prevention and cleanup materials will be kept by the contractor onsite at all times during construction.

BIO-7: During construction, erosion control measures will be implemented. Fiber rolls and barriers will be installed as needed between the project site and jurisdictional other waters and riparian habitat. At a minimum, erosion controls will be maintained by the contractor on a daily basis throughout the construction period.

BIO-8: During construction, the staging areas will conform to Best Management Practices applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles will be checked and maintained by the contractor on a daily basis to ensure proper operation and avoid potential leaks or spills.

BIO-9: Before the removal of the diversion, stream contours will be restored as close as possible to their original condition.

Yadon's Piperia

Compensatory Mitigation for Yadon's Piperia

The compensatory mitigation described for Jurisdictional Waters (Measure BIO-1) that includes replanting affected areas temporarily disturbed at Culvert Locations 6 (post mile 2.20), 8 (post mile 2.73), and 9 (post mile 2.80) with native vegetation will also mitigate for the impacts to Yadon's piperia critical habitat. As such, with the implementation of the described mitigation, no additional compensatory mitigation is required for this species, and none is proposed.

Avoidance and Minimization Measures for Yadon's Piperia

BIO-10: An environmental training program will be developed to educate construction personnel about special-status plant and animal species with the potential to be encountered during construction and the avoidance measures being used to prevent impacts to these species. [The following sentence has been added since the draft environmental document was circulated.] Upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures.

BIO-11: Before the start of construction activities, biological monitors will conduct preconstruction surveys. If the biological monitors identify that work could affect a listed plant species, they will notify the resident engineer immediately. The resident engineer will resolve the situation by eliminating the effect immediately or requiring that all actions that are causing the effects to be stopped until coordination with the appropriate resource agency is completed.

Invasive Species

Avoidance and Minimization Measures for Invasive Species

BIO-12: During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.

BIO-13: Only clean fill will be imported. When practicable, invasive exotic plants in the project site will be removed and properly disposed of. Inclusion of any species that occurs on the California Invasive Plant Council's Invasive Plant Inventory in the Caltrans erosion control seed mix or landscaping plans for the project will be avoided.

Monterey Pine

Compensatory Mitigation for Monterey Pine

BIO-14: Monterey pine trees will be replaced onsite at a 1-to-1 ratio in non-jurisdictional areas. Monterey pines that are less than 24 inches in diameter at breast height and in jurisdictional areas will be replaced at a 3-to-1 ratio, and Monterey pines that are 24 inches or larger in diameter at breast height in

jurisdictional areas will be replaced at a 10-to-1 ratio. Replacement plantings will be detailed in the project Landscape Planting Plans. Tree plantings will be monitored to ensure successful revegetation at six months and then once a year for three years.

Avoidance and Minimization Measures for Monterey Pine

BIO-15: Removal of Monterey pines will be avoided to the greatest extent possible.

BIO-16: All Monterey pine trees that will remain in the project vicinity will be delineated on design plans. Before ground-disturbing activities, temporary Environmentally Sensitive Area fencing or flagging will be installed around trees to be protected.

Oak Woodlands

Compensatory Mitigation for Oak Woodlands

BIO-17: Coast live oak trees will be replaced onsite at a 1-to-1 ratio in non-jurisdictional areas. Coast live oak trees that are less than 24 inches in diameter at breast height and occur within jurisdictional areas will be replaced at a 3-to-1 ratio. Coast live oak trees that are 24 inches or larger in diameter at breast height and occur within jurisdictional areas will be replaced at a 10-to-1 ratio. Replacement plantings will be detailed in the project Landscape Planting Plans. Tree plantings will be monitored to ensure successful revegetation at six months and then once a year for three years.

Avoidance and Minimization Measures for Oak Woodlands

BIO-18: Removal of coast live oak trees will be avoided to the greatest extent feasible.

BIO-19: All coast live oak trees that will remain in the project vicinity will be delineated on design plans. Before ground-disturbing activities, temporary Environmentally Sensitive Area fencing or flagging will be installed around trees to be protected.

Special-Status Plant Species

Avoidance and Minimization Measures for Hooker's Manzanita and Sandmat Manzanita

BIO-20: Temporary high visibility fencing will be used to establish Environmentally Sensitive Areas during construction to ensure full avoidance of hooker's manzanita and sandmat manzanita plants that were mapped during surveys.

Special-Status Animal Species

Avoidance and Minimization Measures in Accordance with the Programmatic Biological Opinion for California Red-Legged Frog

Caltrans anticipates the project will qualify for Federal Endangered Species Act incidental take coverage under the Programmatic Biological Opinion for Projects Funded or Approved under the Federal Highway Administration's Federal Aid

Program (U.S. Fish and Wildlife Service 2011) (California red-legged frog Programmatic Biological Opinion), which includes the following applicable measures.

BIO-21: A U.S. Fish and Wildlife Service-approved biologist will survey the project area at locations with suitable California red-legged frog habitat no more than 48 hours before the onset of work activities. If found, the U.S. Fish and Wildlife Service-approved biologist will relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and will not be affected by the activities associated with the project. The relocation site will be in the same drainage to the extent practicable.

BIO-22: Before any activities begin on a project, a U.S. Fish and Wildlife Service-approved biologist will conduct a training session for all construction personnel. At a minimum, the training will 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. [The following sentence has been added since the draft environmental document was circulated.] Upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures.

BIO-23: A U.S. Fish and Wildlife Service-approved biologist will be present at the project locations with suitable California red-legged frog habitat until all California red-legged frogs have been removed, workers have been instructed, and initial disturbance of habitat has been completed. If work is stopped because California red-legged frogs will be affected in a manner not anticipated by Caltrans and U.S. Fish and Wildlife Service during a review of the proposed action, they will notify the resident engineer immediately. When work is stopped, U.S. Fish and Wildlife Service will be notified as soon as possible.

BIO-24: During project activities, all trash that may attract predators or scavengers will be properly contained, removed from the worksite, and disposed of at the end of each workweek. Following construction, all trash and debris will be removed from work areas.

BIO-25: All refueling, maintenance, and staging of equipment and vehicles will occur at least 100 feet from riparian habitat or water bodies and not in a location from where a spill will drain directly toward aquatic habitat unless otherwise preapproved by the necessary agencies.

BIO-26: Habitat contours will be returned to a natural configuration at the end of the project activities. This measure will be implemented in all areas disturbed by activities associated with the project at locations with suitable California red-legged frog habitat unless the U.S. Fish and Wildlife Service and Caltrans determine that it is not feasible or modification of original contours will benefit the California red-legged frog.

BIO-27: The number of access routes, size of staging areas, and the total area of activity will be limited to the minimum necessary to achieve the project. Environmentally Sensitive Areas will be established 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-28: Caltrans will attempt to schedule work for times of the year when impacts to the California red-legged frog will be minimal. For example, work that will affect large pools that may support breeding will be avoided, to the maximum degree practicable, during the breeding season (November through May).

BIO-29: To control sedimentation during and after project completion, Caltrans will implement Best Management Practices outlined in any authorizations or permits issued under the authorities of the Clean Water Act received for the project.

BIO-30: If a worksite is to be temporarily dewatered by pumping, intakes will be completely screened with wire mesh not larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. Water will 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 will be removed in a manner that will allow flow to resume with the least disturbance to the substrate. Alteration of the streambed will be minimized to the maximum extent possible; any imported material will be removed from the streambed upon completion of the project.

BIO-31: Unless approved by U.S. Fish and Wildlife Service, water will not be impounded in a manner that may attract California red-legged frogs.

BIO-32: Project sites will be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials will be used to the extent practicable. Invasive, exotic plants will be controlled to the maximum extent practicable.

BIO-33: Caltrans will not use herbicides as the primary method to control invasive, exotic plants. [The following sentence has been added since the draft environmental document was circulated.] If Caltrans determines that the use of herbicides is the only feasible method to control invasive, exotic plants at a site, the following additional protective measures will be implemented to protect California red-legged frogs as applicable in accordance with the following specific protective measures in Measure 18 in the Biological Opinion for California Red-legged Frog:

[The following text has been added since the draft environmental document was circulated.]

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

b. Caltrans will conduct surveys for the California red-legged frog immediately before the start of any herbicide use. If found, California red-legged frogs will be relocated to suitable habitat far enough from the project area that no direct contact with herbicides will occur;
c. Giant reed and other invasive plants will be cut and hauled out by hand and then painted with glyphosate or glyphosate-based products, such as AquaMaster® or Rodeo®
d. Licensed and experienced Caltrans staff or a licensed and experienced contractor will use a handheld sprayer for foliar application of AquaMaster® or Rodeo® where large monoculture stands occur at an individual project site;
e. All precautions will be taken to ensure that no herbicide is used on native vegetation.
f. Herbicides will not be used on or near open water surfaces (no closer than 60 feet from open water).
g. Foliar applications of herbicide will not occur when wind speeds are more than 3 miles per hour.
h. No herbicides will be used within 24 hours of forecasted rain.

BIO-34: Upon completion of the project, Caltrans will ensure that a Project Completion Report is completed and provided to U.S. Fish and Wildlife Service, following the template provided with the Programmatic Biological Opinion.

Compensatory Mitigation for California Red-Legged Frog

The compensatory mitigation prescribed for impacts to jurisdictional waters will also mitigate impacts to California red-legged frog habitat.

Compensatory Mitigation for California Tiger Salamander

Compensatory mitigation for California tiger salamander impacts will be required as part of the Section 2081 Incidental Take Permit from the California Department of Fish and Wildlife, as prescribed in the following measure:

BIO-35: The Section 2081 Incidental Take Permit to be acquired for the proposed project is expected to require compensatory habitat mitigation and permanent protection and perpetual management of up to 0.018 acre for permanent impacts to potential California tiger salamander upland habitat (up to a 3-to-1 compensatory mitigation ratio for 0.006 acre of permanent impacts) and up to 2.427 acres for temporary impacts to potential California tiger salamander upland and breeding habitat (up to a 1-to-1 compensatory mitigation ratio for 2.427 acres of temporary impacts), resulting in an anticipated compensatory mitigation lands total of 2.445 acres.

Before starting ground-disturbing or vegetation-disturbing project activities, Caltrans will satisfy the requirement to provide an anticipated 2.445 acres of California tiger salamander habitat by complying with one of the following:

a. Purchase credits equivalent of up to 2.445 acres at a California Endangered Species Act-certified and California Department of Fish and Wildlife-approved Conservation Bank (in a location to be determined) authorized to sell credits for California tiger salamander; or,

b. Acquire, permanently preserve, and perpetually manage up to 2.445 acres of Habitat Management Lands.

Avoidance and Minimization Measures for California Tiger Salamander

BIO-36: All avoidance and minimization measures for dewatering activities previously described for California red-legged frog will also apply to California tiger salamander. During dewatering activities, a biologist approved by the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife will be onsite for the duration of dewatering activities to ensure there are no impacts to California tiger salamanders as a result of dewatering.

BIO-37: Caltrans will obtain U.S. Fish and Wildlife Service and California Department of Fish and Wildlife approval of biologist(s) before project-related activities that may result in impacts to California tiger salamanders. An approved biologist will be present at all surveys and during all initial ground-disturbing activities in areas of potential California tiger salamander habitat to help minimize or avoid impact to the California tiger salamander and to minimize disturbance of habitat.

BIO-38: Designated Monitors may monitor project activities after initial ground-disturbing activities have been completed. If the Biologist or Designated Monitor recommends that work be stopped, they will notify the resident engineer immediately. The resident engineer will resolve the situation by requiring that all actions that are causing these effects are halted.

BIO-39: Biologists and/or Designated Monitors will ensure that their activities do not transmit diseases or pathogens harmful to amphibians, such as chytrid fungus *(Batrachochytrium dendrobatidis),* by following the fieldwork code of practice developed by the Declining Amphibian Populations Task Force.

BIO-40: Ground disturbance will not begin until written approval is received from the U.S. Fish and Wildlife Service that the biologist is qualified to conduct the work.

BIO-41: Before any construction activities begin, the approved biologist will conduct an education program for all persons employed or otherwise working on the project site before performing any work onsite. The program will include a discussion of the biology of the California tiger salamander and project-specific avoidance and minimization measures. [The following sentence has been updated since the draft environmental document was circulated.] Upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures.

BIO-42: During project activities, all trash that may attract predators will be properly contained, removed from the worksite, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.

BIO-43: All refueling, maintenance, and staging of equipment and vehicles will occur at least 60 feet from riparian and pond habitat. Measures will be taken to avoid situations where a spill could drain directly toward aquatic habitat.

Avoidance and Minimization Measures for Western Pond Turtle

Implementation of many of the measures outlined for California red-legged frogs will avoid and minimize impacts to individuals of this species. Additionally, Best Management Practices implemented to avoid impacts on water quality will avoid impacts on aquatic habitat for the western pond turtle. The following specific avoidance and minimization measures will be implemented for potential impacts to western pond turtles:

BIO-44: Before mobilization of construction equipment, Caltrans will conduct a worker environmental training program including a description of the western pond turtle, their legal/protected status, proximity to the project site, and avoidance/minimization measures to be implemented during the project. [The following sentence has been added since the draft environmental document was circulated.] Upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures.

BIO-45: Before the start of construction activities, a qualified biologist will survey the Area of Potential Impact at jurisdictional locations and, if present, capture and relocate any western pond turtles to suitable habitat outside of the Area of Potential Impact. Observations of western pond turtles will be documented on the California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

Avoidance and Minimization Measures for Coast Range Newt and Western Spadefoot

BIO-46: A preconstruction survey before the start of ground disturbance will occur at locations with suitable coast range newt habitat and at location 24 (post mile 10.56) with suitable western spadefoot habitat by a Caltrans biologist. If any individuals are found to be present, individuals will be relocated by a qualified biologist to a nearby location with suitable habitat. Observations of coast range newt and/or western spadefoot will be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

Compensatory Mitigation for Western Pond Turtle, Coast Range Newt, and Western Spadefoot

The compensatory mitigation described for Jurisdictional Wetlands/Other Waters will also mitigate the impacts to the western pond turtle, coast range newt, and western spadefoot. As such, with the implementation of the described mitigation, no

additional compensatory mitigation is required for these species, and none is proposed.

Avoidance and Minimization Measures for Two-Striped Gartersnake and California Legless Lizard

BIO-47: A Caltrans biologist will conduct a preconstruction survey before the start of ground disturbance at locations with suitable habitats for two-striped gartersnakes and California legless lizards. If present, individuals will be relocated by a qualified biologist to a nearby location with suitable habitat. Observations of two-striped gartersnakes and California legless lizards will be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

Avoidance and Minimization Measures for American Badger

BIO-48: Within 30 days before initiation of site disturbance and/or construction, a qualified biologist will conduct a pre-activity (i.e., preconstruction) survey for American badger dens in areas with suitable habitat for the species within the Area of Potential Impact (post mile 13.84 and post mile 15.65). If an active den for American badger is discovered, a 100-foot buffer will be implemented to avoid the den. If an active pupping den is discovered, no work may proceed within the 100-foot buffer until the young are grown and no longer dependent on the natal den. Reductions in the buffer will be contingent on coordination with the California Department of Fish and Wildlife to determine an appropriate alternative avoidance strategy.

During project construction, if any observations are made of American badgers, including dead animals, or if dens are discovered within or adjacent to the project limits, the contractor will contact the Caltrans Project Biologist. All work will stop within 100 feet of a live animal or active den until the Caltrans Biologist determines it is appropriate to resume work.

Avoidance and Minimization Measures for Monterey Dusky-Footed Woodrat

BIO-49: Preconstruction surveys for Monterey dusky-footed woodrat nests will be conducted within and adjacent to the project area at post mile 6.32 (Location 19) and post mile 10.29 (Location 23). If active nests are found within the project area, the biologist will flag the area to establish a 25-foot buffer around active nests where work will not occur. If nests are present in a location that cannot be avoided by work activities, before starting work at this location, Caltrans biologists will deconstruct woodrat nests during the nonbreeding season to minimize impacts on breeding success. Observations of Monterey dusky-footed woodrat will be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

Avoidance and Minimization Measures for Tricolored Blackbird

BIO-50: A Caltrans biologist or qualified representative will provide workers with training and/or informational material to be used in identifying tricolored blackbirds,

protocols for responding to their presence within the construction area, and notification procedures if they arrive in the construction area. [The following sentence has been added since the draft environmental document was circulated.] Upon completion of a training program, attendees will sign a form stating they attended the program and understand all protection measures.

BIO-51: Construction at Location 24 (post mile 10.56) will occur outside of the tricolored blackbird nesting season (March 1-August 31). A work window between September 1 and September 30 will be implemented to avoid impacting nesting tricolored blackbirds.

BIO-52: Two preconstruction nesting surveys for tricolored blackbirds will be conducted within a 500-foot area around Location 24 (post mile 10.56), 1) within 30 days of construction activities, and 2) no more than 3 days before the start of ground-disturbing activities. A Caltrans Biologist will be contacted at least 14 days before the start of construction activities to schedule preconstruction surveys. If an active tricolored blackbird nest is found, a Caltrans biologist will establish a 500-foot buffer around the active nest until the young have fledged. Work will not occur within the buffer until the young have fledged and the nest is determined to no longer be active.

Other Migratory and Nesting Birds

Avoidance and Minimization Measures for Other Nesting Birds

The following measures apply to all birds protected by the Migratory Bird Treaty Act and the 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 included in Table 6 of the project's Natural Environment Study. There are no formal survey protocols for most of these bird species, but the California Department of Fish and Wildlife typically requires preconstruction nesting bird surveys and avoidance of impacts to active bird nests.

BIO-53: If feasible and regulatory approvals allow, tree removal for this project will be scheduled to occur from October 1 to January 31, outside of the typical nesting bird season, to avoid potential impacts to nesting birds.

If tree removal and other vegetation removal or other construction activities are proposed to occur within 100 feet of potential nesting habitat during the nesting season (February 1 to September 30), a nesting bird survey will be conducted by a biologist determined qualified by Caltrans no more than three days before construction. If an active nest is found, Caltrans will determine an appropriate buffer based on the habits and needs of the species. The buffer area will be avoided until a qualified biologist has determined that juveniles have fledged.

BIO-54: During construction, active bird nests will not be disturbed, and eggs or young birds covered by the Migratory Bird Treaty Act and the California Fish and Game Code will not be killed, destroyed, injured, or harassed at any time. Readily visible exclusion zones where nests must be avoided will be established by a

qualified biologist. Work in exclusion zones will be avoided until young birds have fledged (permanently left the nest) or the qualified biologist has determined that nesting activity has otherwise ceased.

2.1.5 Cultural Resources

The Cultural Resources Screened Undertaking Memorandum for State Route 68 Drainage Improvements, dated November 18, 2021, concluded that no archaeological or historic era resources will be impacted by the project. No human remains are expected to be disturbed. Considering the information in the Screened Undertaking Memorandum, the following significance determinations have been made:

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

The project is not capacity increasing, and, therefore, there will be no significant long-term increase in energy consumption. Minor use of fuels and other energy sources will be required during maintenance of the repaired or replaced culvert systems, new lighting, and new census station infrastructure. However, the replacement of new infrastructure will reduce the potential future scheduled and unanticipated maintenance operations and any affiliated energy use for maintenance vehicle access and equipment usage.

Energy usage will be necessary during construction activities at the project culvert, lighting, and census station locations. Energy consumption will be minimized whenever possible through recycling of materials and implementation of greenhouse gas reduction strategies as discussed in Section 2.1.8, Greenhouse Gas Emissions.

The following significance determinations have been made:

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

2.1.7 Geology and Soils

[The following sentence has been updated since the draft environmental document was circulated.] Geotechnical investigations for this project were conducted during the Project Approval and Environmental Document phase to provide subsurface information to inform the trenchless method for the culvert locations where that is proposed. Subsurface drilling was conducted at multiple locations within the existing highway pavement/shoulder areas of the project limits and within the Area of Potential Impact analyzed for the environmental studies. Separate environmental analyses were conducted for the subsurface investigation, and clearance was approved with Categorical Exemption/Categorical Exclusion documentation in accordance with Caltrans' standard environmental procedures.

An overview of the geology, soils, and geological hazards for the project area is provided in the discussion sections below the checklist. Available sources referenced for this information include the Paleontological Identification Report dated December 1, 2021, the Jurisdictional Delineation Report included in the Natural Environment Study dated December 20, 2021, and online information and mapping from the County of Monterey Geographical Information Systems. (https://www.co.monterey.ca.us/government/departments-a-h/housing-community-development/resources/monterey-county-gis-maps).

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

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	**No Impact**
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: ii) Strong seismic ground shaking?	**No Impact**
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iii) Seismic-related ground failure, including liquefaction?	**Less Than Significant Impact**
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iv) Landslides?	**No Impact**
b) Result in substantial soil erosion or the loss of topsoil?	**Less Than Significant Impact**
c) Be located on a geologic unit or soil that is unstable, or that will 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 waste water disposal systems where sewers are not available for the disposal of waste water?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**No Impact**

Affected Environment

According to the Jurisdictional Delineation Report included with the Natural Environment Study, the project limits include a variety of soil types, including loamy sands, sandy loams, clay loams, fine sands, and loams, on slopes ranging from 2 to 30 percent steepness. In addition, data and mapping available from the County of Monterey Geographical Information Systems as well as the Paleontological Identification Report for the project provide information about geologic and soil hazards for the project area.

Several primarily northwest-southeast trending faults overly the greater Monterey-Salinas region, including the project area. The easterly portion of the project, the Monterey-Salinas Highway segment from State Route 1 to Toro County Park, is along the floor of the east-west trending Del Rey Canyon which approximately parallels the Chupines Fault. This segment of the project route has high susceptibility for liquefaction (the conversion of soil into a fluid-like mass during an earthquake or other seismic event) as well as high landslide potential on the south side of State Route 68 opposite the Laguna Seca Golf Ranch to York Road. In the other portions of the project limits east of State Route 1, the geologic features indicate moderate landslide potential. The Holman Highway portion of State Route 68 through the Monterey Peninsula has a series of uplifted marine terrace deposits underlain by Miocene age marine geologic units and or granitic bedrock. This segment is not identified for landslide potential.

Erosion potential is mostly high in the easterly portion of the project east of State Route 1, with the exception of the subdivision on the north side of the highway near the Toro County Park/State Route 68 interchange, which has low erosion potential. The portion of the project limits on the Monterey Peninsula has primarily low erosion potential.

Environmental Consequences

The project includes 13 culvert systems (Culvert Locations 14 A and B to 26 A and B) within an area of high liquefaction potential along State Route 68 from State Route 1 to Toro County Park. The project also includes three culvert systems (Locations 20, 21, and 22 A and B) between Laguna Seca Golf Ranch and York Road, where the geologic conditions are identified as having a high potential for landslides, according to geological hazards mapping from the County of Monterey. Culvert locations that are planned for repair using the cut-and-cover method will place the new culverts at the same depth below the ground surface as the existing culverts that are being replaced (within 3 to 10 feet below the highway). Trenches

cut for the repair work will be laid back into slopes and embankments, which will be required to be shored at 95 percent compaction to ensure there will be no roadway or embankment slope failures. The three culvert locations where the trenchless method of replacement is planned (Locations 19, 20, and 23) in the liquefaction and landslide-prone areas of the eastern portion of the project limits will also have slope compaction specifications so as not to cause potential instability of the soils on or offsite. In addition, the culvert repairs will not increase the groundwater levels in the work areas and will, therefore, not increase the liquefiable potential of the soils in the project construction areas.

In addition, standard specifications and Best Management Practices will be implemented during construction at project work locations for control of erosion and sedimentation from the construction work areas, as further discussed in Section 2.1.10, Hydrology and Water Quality. Therefore, it is expected that construction of the culvert replacements and repairs, traffic census stations, and lighting improvements will not directly or indirectly cause potential adverse effects related to seismic events, landslides, soil instability, liquefaction, or erosion.

The planned culvert and Transportation Management System improvements are not expected to affect paleontological resources. The trenching, light grading, and excavation at the cut-and-cover culvert locations and at the proposed jacking pit areas for the trenchless method locations are not expected to extend into undisturbed deposits that have a high potential for preserving paleontological resources or will be likely to contain well-preserved fossils.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed.

2.1.8 Greenhouse Gas Emissions

Considering the information in the Climate Change Technical Report dated November 22, 2021, and the Air Quality, Greenhouse Gas, Noise, and Water Quality Technical Memorandum dated August 10, 2021, the following significance determinations have been made:

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

Affected Environment

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

The 1990-2019 greenhouse gas inventory for the nation prepared by the U.S. Environmental Protection Agency found that overall greenhouse gas emissions were 6,558 million metric tons in 2019, down 1.7 percent from 2018 but 1.8 percent higher than 1990 levels. The transportation sector accounted for 29 percent of the national greenhouse gas emissions in 2019 (U.S. Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2019, EPA 430-R-21-005, https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019. Accessed: September 5, 2021).

The California Air Resources Board collects greenhouse gas emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. The data is summarized, and major trends are identified to demonstrate the state's progress toward meeting its greenhouse gas reduction goals. The 2021 edition of the *Greenhouse Gas Inventory 2000-2019, Trends of Emissions and other Indicators Report* (California Air Resources Board, July 28, 2021) identified total emissions of 418.2 million metric tons of carbon dioxide equivalent statewide for 2019, a reduction of 7.2 million metric tons of carbon dioxide equivalent since 2018, with the transportation sector responsible for nearly 40 percent of the total greenhouse gases. The inventory also found that overall statewide greenhouse gas emissions declined from 2000 to 2019 despite growth in population and state economic output (California Air Resources Board 2021, https://ww2.arb.ca.gov/ghg-inventory-data/).

The project is within the jurisdiction of the Transportation Agency for Monterey County, which is designated by the State of California as the Regional Transportation Agency for the county. The Association of Monterey Bay Area Governments is the joint power, multi-planning agency for the area and the federal Metropolitan Planning Organization for the region. The Transportation Agency for Monterey County updates the Regional Transportation Plan every four years in coordination with the Association of Monterey Bay Area Governments, which prepares a Metropolitan Transportation Plan for the three counties of Monterey, San Benito, and Santa Cruz. The Regional Transportation Plan provides a basis for actions to allocate state and federal funding for transportation improvement projects.

In 2008, the State of California enacted Senate Bill 375, which requires Metropolitan Planning Organizations to prepare a Sustainable Communities Strategy. The

Strategy integrates land use and transportation planning by coordinating transportation investments with land use patterns to reduce greenhouse gas emission targets set by the state for each region. The California Air Resources Board sets regional targets for California's 18 Metropolitan Planning Organizations to use in their Regional Transportation Plan/Sustainable Communities Strategy to plan future projects that will cumulatively achieve greenhouse gas reduction goals. Targets are set at a percent reduction of passenger vehicle greenhouse gas emissions per person from 2005 levels. The regional reduction target for the Association of Monterey Bay Area Governments is 6 percent by 2035 (Air Resources Board 2019c). The Transportation Agency for Monterey County coordinated with the Association of Monterey Bay Area Governments to develop a Policy Element, a Financial Element, and a list of regional transportation investments that achieve greenhouse gas emissions reduction targets and support the Association of Monterey Bay Area Government's 2040 Metropolitan Transportation Plan-Sustainable Communities Strategy (Transportation Agency for Monterey County Regional Transportation Plan 2018 (ii)).

The 2018 Regional Transportation Plan identifies State Route 68 as an interregional travel route providing east-west access for traffic between the coast and U.S. 101. The over 15-mile portion of State Route 68 in the project limits transects a variety of land uses, including rural-to-low-density residential, open space, public facilities, and light commercial. Most of the project route is in a rural/suburban landscape amidst scenic coastal and inland open spaces. The project setting for the drainage infrastructure repairs on State Route 68 is partially in the coastal zone on the Monterey Peninsula from post mile 0.2 to post mile L4.264 and partially in the inland portion of the highway east of the interchange with State Route 1, from post mile R4 to post mile 15.7. Existing traffic volumes (2019) along State Route 68 vary widely from the lightly traveled coastal residential and open space segment in the Pacific Grove area of the Monterey Peninsula (annual average daily traffic volumes ranging from 3,400 to 9,600) to the urban Salinas portion near U.S. 101 (between 22,300 and 35,800 average annual daily trips) (Caltrans State Highway Traffic Census data 2019).

Environmental Consequences

Greenhouse gas emissions from transportation projects can be divided into those produced during the operation of the state highway system and those produced during the construction of highway facility improvements. The primary greenhouse gases produced by the transportation sector are carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons. Carbon dioxide emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of methane and nitrous oxides are emitted during fuel combustion. Relatively small amounts of hydrofluorocarbon emissions are generated by the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Public Resources Code, Section 21083(b)(2)). To assess the incremental effects that an individual project will

contribute to the cumulative impacts of greenhouse gas generation, the project's greenhouse gas emissions must be considered along with the emissions from past, present, and reasonably foreseeable (probable) future projects. Not every individual project that emits greenhouse gases must necessarily be determined to contribute to a significant cumulative impact on the environment.

Operational Emissions

Long-term operational increases in greenhouse gas emissions are not expected for the project because the project will not increase the capacity of State Route 68 (for example, adding travel lanes). Therefore, it will not increase vehicle miles traveled on the route. Non-capacity increasing projects generally cause minimal or no increase in operational greenhouse gas emissions in the long term. [The following sentence has been updated since the draft environmental document was circulated.] The improved condition of the culvert infrastructure with the project will include slope stabilization, where necessary, at culvert inlets and outlets, which will reduce the potential number of maintenance-related operational vehicle trips to the culvert locations in the long term, thereby providing greenhouse gas reduction benefits.

Construction Emissions

Construction greenhouse gas emissions will result from material processing, onsite construction equipment, and traffic delays due to construction. These emissions will 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 the construction phase. In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the greenhouse gas emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Estimated greenhouse gas emissions from project construction activities were quantified using the Caltrans Construction Emissions Tool, using settings for stormwater and drainage projects. Greenhouse gas emissions are estimated to total about 179 tons of carbon dioxide per year, or 150 tons of carbon dioxide equivalents, during the 150-day project construction period (about five months). Carbon dioxide equivalent is a measure used to compare emissions from a variety of greenhouse gases based on their global warming potential. For the project, the carbon dioxide equivalent calculation considers carbon dioxide and converted amounts of methane, nitrous oxide, and hydrofluorocarbons. The project will not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing greenhouse gas emissions.

Standard Measures and Project Features

The frequency and occurrence of greenhouse gas emissions during the construction period will be reduced by the implementation of Caltrans' Standard Plans and Standard Specifications and Best Management Practices. All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions

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

Certain project features will also help reduce greenhouse gas emissions. The project will install two traffic census stations in the project limits that will provide information to assist in improving traffic flow and overall system efficiency on the route. The Transportation Management Plan described in Section 1.4.1 will be designed to limit the length of lane closures and minimize traffic delays during construction. A wider temporary shoulder area of the highway at the construction locations will improve accessibility for bicyclists and support alternative forms of transportation.

In addition, the replanting of trees and other native vegetation removed for the construction of the project improvements, as mitigation prescribed in Section 2.1.4, will sequester carbon. The Revegetation Landscape Plan will include standard practices of compliance with the statewide Model Water Efficient Landscape Ordinance or local agency ordinance for water conservation for project landscape maintenance and inclusion of landscaping components such as mulch and compost application to improve carbon sequestration rates in soils and reduce organic waste.

Therefore, while the project will result in greenhouse gas emissions during construction, it is expected that the project will not result in operational greenhouse gas emissions.

Greenhouse Gas Reduction Strategies

In addition to Caltrans' standard practices and project features, implementation of the following greenhouse gas reduction strategies will further help offset greenhouse gas emissions during project construction:

GHG-1: Reduce construction waste and maximize the use of recycled materials, including but not limited to the replaced culvert pipes, joints, and other components, stockpiling pavement grindings for future use, salvaging rebar from demolished concrete, and processing waste to create usable fill.

GHG-2: Operate construction equipment with improved fuel efficiency by:

- Properly tuning and maintaining equipment
- Limiting idling to five minutes for delivery and dump trucks and other diesel-powered equipment
- Using the right-sized equipment for the job
- Using equipment with newer technologies

- Use of alternative fuels such as renewable diesel as feasible
- Produce hot mix asphalt with warm mix technology

GHG-3: Balance earthwork (cut and fill quantities) to reduce the need for transport of earthen materials.

GHG-4: Schedule truck trips outside of peak morning and evening commute hours.

GHG-5: Reduce water consumption during construction and prioritize the use of recycled water for construction needs.

GHG-6: Salvage large trees that are removed and repurpose them for lumber, landscaping, or other onsite beneficial uses as feasible.

GHG-7: Improve carbon sequestration rates through the application of compost before seeding and replanting disturbed areas and use of compost socks in place of straw wattles.

GHG-8: Conduct construction environmental training to provide construction personnel with information regarding methods to reduce greenhouse gas emissions related to construction. [The following sentence has been added since the draft environmental document was circulated.] Upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures.

GHG-9: Maintain pedestrian, bicycle, and transit access throughout construction.

2.1.9 Hazards and Hazardous Materials

Considering the information provided in the Initial Site Assessment (December 2021) for the project and other sources cited in the discussion below, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	**Less Than Significant Impact**
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	**Less Than Significant Impact**

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	**Less Than Significant Impact**
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	**Less Than Significant Impact**
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, will the project result in a safety hazard or excessive noise for people residing or working in the project area?	**Less Than Significant Impact**
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	**Less Than Significant Impact**
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	**Less Than Significant Impact**

Affected Environment

Hazardous materials record databases included several closed cases of leaking underground storage tanks adjacent to the project limits along State Route 68, including petroleum hydrocarbon, contamination of soil, and/or groundwater. Four of these cases were between David Avenue and Stuart Avenue on the Holman Highway portion of the project limits, and four were in the eastern segment between State Route 1 and Portola Avenue. All of the recorded cases were determined closed, and contamination is not expected to be encountered in the project repair and installation locations or affiliated areas of temporary construction easements or drainage easements.

Fort Ord is a 28,000-acre former U.S. Army post along the northern boundary of the Monterey-Salinas segment of State Route 68. The fort property is a Superfund site listed in 1990 on the Superfund program's National Priorities List, and extensive cleanup efforts have been undertaken and are ongoing. Cleanup of munitions and groundwater contamination has been completed on nearly 12,000 acres of the property, and the U.S. Environmental Protection Agency has proposed to remove that area from the National Priorities List. The cleanup area includes the southeastern portion of the property near the Laguna Seca Raceway and State Route 68 near project Culvert Location 25.

Environmental Consequences

Soil and Groundwater Contamination. As addressed in the Initial Site Assessment Memorandum dated December 1, 2021, contamination from leaking underground storage tanks, the Fort Ord U.S. Army post-Superfund site, or any other hazardous materials cases is not expected to be encountered within and adjacent to the State Route 68 corridor during project construction. Known leaking underground storage tank cases are now closed. Three groundwater contamination plumes are located in the north-central portion of the Fort Ord property; however, given the direction of groundwater flow, contamination is not expected to be encountered during the culvert repair activities in this area of the highway.

Unexploded Ordnance. Given the history of infantry and artillery training at the Army fort, there is potential for discovery of unexploded ordnance within the State Route 68 project limits during project construction and/or maintenance activities. In the event that unexploded ordnance is discovered, work will stop immediately, and the police or sheriff's departments will be notified via 911. Procedural protocols will be followed in accordance with the Ordnance and Explosives at Former Fort Ord Pamphlet as included in the Initial Site Assessment Technical Memorandum for the project and as prescribed in measure HAZ-1 in the Avoidance and Minimization Measures section below. Construction activities and long-term maintenance of drainage infrastructure at the north end of Culvert Location 25 (post mile 13.84) will be conducted within the state highway right-of-way. To avoid or minimize potential encounters with unexploded ordnance, access onto the adjacent federal property to the north at Location 25 (Assessor's Parcel Number 031-011-014-000) will be prohibited through the implementation of measure HAZ-2.

Routine Hazardous Waste Issues. Standard Special Provisions have been developed for the proper handling, treatment, and disposal if needed of routine hazardous materials and wastes encountered during highway construction activities to protect the health of workers, the public, and the environment. Routine hazardous materials and wastes that may be encountered for the project are discussed below.

Aerially Deposited Lead. Aerially deposited lead from the historical use of leaded gasoline exists along roadways throughout California. Soil determined to contain 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. This Aerially Deposited Lead Agreement allows such soils to be safely reused within the project limits as long as all requirements of the Aerially Deposited Lead Agreement are met. Preliminary site investigations performed within portions of the project corridor indicate that soil contaminated with aerially deposited lead is present at Culvert Locations 1 through 13 and near Location 25. Locations 15 through 24 and Location 26 have not been sampled for Aerially Deposited Lead, but, for the purposes of the CEQA analysis, it is assumed that Aerially Deposited Lead is present in surficial soils at these locations.

Additional soil testing may be required during the project design (Plans, Specifications, and Estimates) phase to document lead concentrations at unsampled locations of project work areas. Applicable standard special provisions will be included on the construction contract, and a lead compliance plan will be prepared and implemented by the construction contractor in accordance with the 2016 Aerially Deposited Lead Agreement.

Treated Wood Waste. Highway guardrail support posts and signposts often consist of wood treated with chemical preservatives to prevent rot or damage from insects. Treated wood waste is considered a hazardous material. At this time, 40 feet of existing guardrail is expected to be removed at Culvert Location 4 (post mile 2.04). During the design phase, it is possible that refinements to that location and/or additional guardrail removal will be identified for other culvert locations. If treated wood waste will be disposed of as part of the project, the Standard Special Provision Section 14-11.14 will be included in the construction contract for proper management and disposal of treated wood waste. With the implementation of appropriate standard special provisions, no adverse effects to human health or the environment are expected.

Other Hazard Topics. There are about a half dozen schools within 0.25 mile of the project limits, among which are Pacific Grove High School at 615 Sunset Drive (State Route 68) in Pacific Grove, the Naval Postgraduate School in Monterey north of State Route 1, the Santa Catalina School at 1500 Mark Thomas Drive, Foothill Elementary School on the south side of State Route 68 across from the regional airport, the San Benancio Middle School south of State Route 68 on San Benancio Road, and the Toro Park School at 22500 Portola Drive, a few blocks north of State Route 68. The project will implement Caltrans' Best Management Practices and other standard procedures during construction activities to properly store, handle and dispose of potentially hazardous materials.

The Monterey Regional Airport is next to State Route 68, east of the interchange with State Route 1. Because the project will improve highway infrastructure, it will not cause a safety hazard or excessive noise to adjacent residents. Noise during construction activities will be minimized in accordance with Caltrans standard specifications included in the construction contract. Refer to the Noise analysis in Section 2.1.13.

State Route 68 is included in the list of designated evacuation routes in the Monterey County General Plan (General Plan Safety Element, Table S-1). In addition, Goal S-5.14 of the Safety Element states that all public thoroughfares, private roads, and deeded emergency accesses are considered potential emergency evacuation routes. The Transportation Management Plan that will be implemented to enable access along State Route 68 during construction will account for emergency evacuations and emergency vehicle access along the State Route 68 corridor, including specification of detour routes for any project construction locations where full highway or ramp closures will be necessary for a temporary period. Refer to additional discussions in Section 1.4.1, Transportation Management Plan, and

Section 2.1.17, Transportation. Therefore, the project will not impair an adopted emergency evacuation plan.

The project will extend the life of the highway drainage, lighting, and traffic management infrastructure. Once installed, the improvements will be mostly underground and, for the culvert repairs, will be in the same locations as existing culverts. The project will not change the existing land uses or generate new development such that new populations and structures will be brought into wildland fire zones. Therefore, the project will not expose residents or businesses to increased risk of loss, injury, or death from wildland fires in the long term or permanently increase the potential for wildfire hazards in the region.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures will be implemented:

HAZ-1: In the event that unexploded ordnance is discovered during construction or maintenance activities at Culvert Location 25 (post mile 13.84), procedural protocols will be followed in accordance with the Ordnance and Explosives at Former Fort Ord Pamphlet as included in the Initial Site Assessment Technical Memorandum (December 1, 2021). If any suspected unexploded ordnance objects are discovered during project construction or maintenance activities, the objects are not to be touched. The location of the objects will be marked, and emergency services (911) called to report what has been found. These protocols will be included in the project construction plans, specifications and estimates, and the culvert database.

HAZ-2: Access onto Assessor's Parcel Number 031-011-014-000 (federal property) will be prohibited during any construction and maintenance activities for Culvert Location 25 at post mile 13.84. The subject federal property where it borders the north side of the culvert work area will be designated an Environmentally Sensitive Area. An Environmentally Sensitive Area fence will be installed along the right-of-way boundary before any construction or maintenance activities. No personnel, equipment, or work will be allowed beyond the state highway right-of-way. The Environmentally Sensitive Area fence will be delineated on the construction plans, and Caltrans' Environmental Construction Liaison will monitor and confirm the correct placement of the fence. The access restriction will be noted in the culvert database.

2.1.10 Hydrology and Water Quality

Considering the information as provided in the Location Hydraulic Study dated August 15, 2021, the Stormwater Data Report dated November 17, 2021, the Natural Environment Study and Jurisdictional Delineation reports dated December 20, 2021, the Air Quality, Greenhouse Gas, Noise, and Water Quality Technical Memorandum dated August 10, 2021, and the Climate Change Technical Report dated November 22, 2021, the following significance determinations have been made:

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

Affected Environment

The project study area crosses through five watersheds (Hydrologic Unit Code-12)—mapped by the U.S. Geological Survey—which drain into Monterey Bay in the Pacific Ocean. The 10 westernmost project culvert locations (post miles 0.25 to 3.01 fall within the Soberanes Creek-Frontal Pacific Ocean Watershed. There are unnamed streams that are receiving waters of the first ten project culverts (post miles 0.25 to 3.01). Culvert Locations 11 through 13 (post miles 3.17-3.82), west of State Route 1, and Culvert Locations 14A through 18, east of the State Route

68/State Route 1 interchange, are in the Monterey Bay Watershed, draining north into El Estero and Del Monte Lake, respectively. Additional receiving waters include Majors Creek and the Salinas River. The remainder of the easterly segment of the project, including Culvert Locations 19 through 25 (post miles 6.32 to 13.84), intersects two intermittent streams—Canyon del Rey Creek and El Toro Creek—and with numerous unnamed tributary creeks in the Canyon del Rey and El Toro watersheds, respectively. The project culverts primarily convey runoff from natural drainage features or sheet flow from roadway drainage through dikes and embankment facilities.

There are two groundwater units within the project vicinity, the Salinas Valley-Seaside (3-004.08) and the Salinas Valley-Monterey (3-004.10). Most of the waters in the study area are not listed on the Central Coast Region's Clean Water Act Section 303(d) list (State Water Quality Control Board 2016), with the exception of the Salinas River and Majors Creek, which have water quality impairments for certain pollutants, such as chloride, sodium, nitrate, turbidity and heavy metals. Many of these pollutants are a result of agricultural farming activities, raising domestic livestock, and urban runoff. Approximate depths of groundwater (highest levels) for the culvert repair locations are estimated to range from 10 to 40 feet below surface level (Geotechnical Investigation Drilling Description for Project 05-1J880, dated September 3, 2021).

Most of the project limits are in areas of minor or no flood hazard zones, designated as Zone X by the Federal Emergency Management Agency. Two floodplains intersect with State Route 68 in the project vicinity, one that intersects across the highway near San Benancio Road and the other that weaves back and forth from north to south along the highway from Laureles Grade west to Harper Creek and State Route 218. [The following sentence has been updated since the draft environmental document was circulated.] According to the Location Hydraulic Study dated August 15, 2021, five of the 24 project culvert systems are in designated flood zones: project culvert locations at post miles 9.67, 9.75, 10.29, and 10.56 are in Flood Zone AO, which is defined by the Federal Emergency Management Agency as areas with flood depths from 1 to 3 feet, usually sheet flow on sloping terrain. Project culvert location at post mile 9.05 is within Zone AE, defined as floodways of a channel of a stream and any adjacent floodplain areas that must be kept free of encroachment so that the 1 percent chance of flood can be carried without substantial increases.

Environmental Consequences

The replacement culverts and infrastructure to be repaired will be replaced at the approximate same locations and alignments and with the same lengths of pipe or slightly longer as the existing facilities. Excavation where trenching (cut-and-cover) method is planned will be at approximately the same depths for repair or replacement of culverts as the existing culverts. At two of the culvert systems (Locations 10 and 22B), the existing pipes will be abandoned in place, and the new culverts will be installed at a shallower depth. For the six system locations where trenchless (potentially jack and bore) methods are planned, the new pipe will also be

constructed at approximately the same depths as the existing infrastructure. Drainage inlets will be modified at various locations to accommodate the installation of the new culverts. Therefore, the project will not cause any substantial alteration of existing drainage patterns.

Eight (about one-third) of the existing project culverts will be replaced with larger diameter pipes or other types of drainage structures (such as at Location 26 A and B with a reinforced concrete box). The larger diameter pipes are planned so that debris will pass more easily and to facilitate maintenance of the drainage infrastructure. The other two-thirds of the project culvert systems will have replacement pipes of the same diameter as the existing pipes (see information in Appendix C which describes the planned repairs and drainage infrastructure dimensions at each project location).

The replacement and repair work will not alter the watersheds that contribute surface runoff via tributaries into the project culverts. Further, as culvert pipe size (diameter) increases, the drainage flow rates (velocities) decrease, and potential scour is reduced; the smaller the pipe diameter, the greater the force of water that builds up behind it. Further, the project will not increase the grade (degree of steepness) of the culvert infrastructure, and at some locations, the grade is planned to be lessened. Pipe inlets will also be designed and spaced to control the quantity of runoff that passes through based on 25-year storm event criteria. As such, the project will not increase quantities or flow rates of surface runoff passing through the pipes.

In addition, as concluded by the Location Hydraulic Study, the project will not cause a significant floodplain encroachment, raise the profile of State Route 68, or have any potentially significant impact on the 100-year floodplain. The culverts will be designed in accordance with Federal Highway Administration criteria to meet 25-year storm events unless they are in a federal flood zone, in which case they will be designed with criteria for 100-year storm events. Therefore, the planned culvert replacement/repairs will not generate additional surface runoff that will increase flood flows in flood zones or cause additional flood hazards that will impact the ability of existing downstream stormwater facilities to convey surface drainage systems capacities.

Although the project excavation for the repair and installation of replacement culvert infrastructure will be at or about the same depth as the existing systems, groundwater is expected to be encountered during construction because the highest groundwater levels are between ten and 20 feet below ground surface at several of the culvert locations (Geotechnical Drilling Description, September 2021). Caltrans' Standard Provisions and Best Management Practices will be implemented by the contractor during excavation, dewatering, and other construction activities for avoidance and minimization of impacts to surface and groundwater quality.

The culvert repairs and replacement activities are not expected to disrupt or redirect groundwater flow or introduce any elements (specifically odor, taste, or radioactivity) that will cause impairment of water quality and related beneficial uses (Air Quality, Greenhouse Gas, Noise, and Water Quality Memorandum dated August 2021). The

proposed construction activities for culvert replacements and repairs and the installation of two new census stations and lighting at one location will not use any groundwater for water supply during construction or for mitigation landscape maintenance and, therefore, will not affect the recharge of local groundwater units. Therefore, the project will not impede or conflict with an existing groundwater management plan.

Construction activities such as excavation for culvert replacements and repair and trenchless (potentially jack and bore) horizontal drilling could potentially discharge stormwater along with erosion and sedimentation into surface waters and receiving water bodies downstream. As noted above in the affected environment section, the Salinas River is impaired for turbidity according to the Central Coast Region's 2016 Clean Water Act Section 303(d) list. The project will involve excavation for each of the culvert repair locations and installation of the two census stations. However, the amount of earthwork overall will not be extensive such that existing turbidity conditions will be increased, according to the Water Quality technical analysis. The project will be designed to avoid impacts from turbidity to receiving waters downstream of the project limits in accordance with the design storm criteria discussed above.

[The following sentence has been updated since the draft environmental document was circulated.] Caltrans Standard Provisions and Best Management Practices outlined in Section 1.7 will be implemented for the avoidance of impacts to surface water and groundwater quality, including potential erosion and sedimentation during construction. A Water Pollution Control Program will be required to be prepared by the construction contractor, who will be responsible for adherence to the specifications and measures therein. Implementation of these standard measures will retain potential project water quality effects to minimal and short-term. In addition, the construction contractor may implement one of several options for groundwater from dewatering activities, such as evaporation or infiltration, reuse onsite for construction activities if the groundwater is not found to be hazardous, or transport and disposal offsite using a Transportation, Storage, and Disposal contractor. These management options will not discharge into a stormwater drain or receiving water.

Project design features will also help minimize long-term erosion and sedimentation. Some of the existing embankments at culvert inlets and outlets are exhibiting slope failure and soil erosion. Replacement of the project culverts will provide for the opportunity to stabilize the embankment slope as well as the placement of rock slope protection at some of the outlets to prevent further embankment erosion and to reduce the concentrated flow velocity. If the damaged culverts are not repaired, there is a high potential for roadway embankment erosion, which could lead to failure of the State Route 68 roadway, and additional erosion and sedimentation impacts to the water quality of downstream drainages and receiving water bodies.

The project limits are outside of the Tsunami Hazard Area according to the California Department of Conservation tsunami hazard areas of Monterey County (https://www.conservation.ca.gov/cgs/tsunami/maps/monterey/).

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed.

2.1.11 Land Use and Planning

As the scope of the project is to repair drainage infrastructure, improve lighting, and add new Transportation Management System elements on State Route 68, existing and future land uses within or adjacent to the project limits will not be changed, nor will it divide an established community. The replacement culverts will be installed in the same locations as the existing infrastructure with minor adjustments of inlets and outlet structures and a minor amount of additional rock slope protection at selected locations for embankment and slope stabilization. The two proposed new census stations will be installed below existing paved surface areas of the highway. No changes to the alignment, function, or capacity of the highway are proposed.

The project will not conflict with the elements of the general plans of Monterey County, the Cities of Pacific Grove and Monterey, or any other land use policy or regulation intended to avoid or mitigate any effects on the environment. Because the project will repair aging drainage infrastructure within the highway corridor and will not increase the capacity of the highway, it will not directly or indirectly cause changes in land uses that will conflict with planning policies and regulations. The project will implement compensatory mitigation for potential impacts to sensitive wildlife and plant species and locally and regionally important habitat types. Avoidance and minimization measures will be implemented to further reduce the project's potential effects on the environmental resources of the project area, including biological resources, visual resources, and the generation of greenhouse gases. Standard provisions and standard special provisions will be applied for noise level controls from construction vehicles and equipment, proper handling and disposal of hazardous materials and waste, and Best Management Practices for the protection of water quality.

Coastal zone policies and regulations for the protection of coastal resources apply to portions of the project limits west of State Route 1, as discussed in Appendix D, Coastal Policy Analysis. Caltrans is undergoing coordination with Monterey County for the Coastal Development Permit application process related to the potential effects of the project on protected coastal resources and Environmentally Sensitive Habitat Areas as provided in the Del Monte Forest Land Use Plan and Coastal Implementation Plan. An application for a Coastal Development Permit will be submitted to Monterey County upon completion of the final environmental documentation. The approved permit will specify the required replacement plantings and any other applicable mitigation measures for impacts to protected coastal resources in the coastal jurisdiction. [The following sentence has been added since the draft environmental document was circulated.] Appendix F contains a

consistency analysis for the Build and No-Build Alternatives regarding applicable County of Monterey General Plan policies and the Monterey County Code ordinances for the inland (non-coastal) portions of the Del Monte Forest Land Use Plan area and Greater Monterey Peninsula Area Plan.

Upon consideration of the above information, the following significance determinations have been made:

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

2.1.12 Mineral Resources

According to the California Geological Survey Mineral Land Classification Map for the project area, the Monterey County 2007 General Plan Draft Environmental Impact Report, Section 4.5.1 Mineral Resources (September 2008), the project limits cross near and adjacent to areas identified with having known mineral resources, including the southern portions of Marina, Seaside and Sand City. The Monterey Peninsula is classified as having undetermined mineral resources of significance. According to Caltrans' Geographic Information Systems resource mapping library, there are no mineral deposits within or near the project limits.

Because the planned culvert and Transportation Management System improvements are infrastructural system upgrades that will not require extensive amounts of excavation and removal (cut) of native soils, there will be no loss of availability of mineral resources of regional or local significance. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
a) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
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

Pursuant to 23 Code of Federal Regulations 772.7, the Federal Highway Administration defines transportation projects as either Type 1 (construction of a highway in a new location or physical alteration of an existing highway that will involve a substantial horizontal or vertical alteration), Type 2 (construction of noise abatement on an existing highway with no changes to highway capacity or alignment) or Type 3 (projects that do not meet the definitions of either Type 1 or Type 2. The project is a Type 3 project because it will not increase the capacity of State Route 68, and it will not involve substantial design alterations or construct noise abatement measures on the highway. Because the project is Type 3, long-term local noise levels on the highway from traffic within the project limits will not be changed, and therefore, noise abatement measures will not be required.

A portion of the project lies within 2 miles of the Monterey Regional Airport, project Culvert Locations 14A and B to Location 19 (post miles R4.14 to 6.32), and the planned census station and lighting improvements at post mile R4.25 and post mile R4.04, respectively. The construction activities at these locations are not expected to generate excessive noise levels that will expose residents or employees in the area.

Considering the information in the Air Quality, Greenhouse Gas, Noise, and Water Quality Technical Memorandum dated August 10, 2021, and the information above, 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**

Question—Would the project result in:	CEQA Significance Determinations for Noise
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, will the project expose people residing or working in the project area to excessive noise levels?	**No Impact**

Affected Environment

Land uses along the length of the project limits that are divided on the west and east of State Route 1 include a combination of rural residential, open space, and institutional. Nearby land uses in the western portion of the project limits on the Monterey Peninsula, from post mile 0.2 to State Route 1 at post mile L4.15, include open spaces forested with Monterey pines and coast live oak trees, rural-to-low-density residential, large institutional properties on both sides of the highway (such as the Community Hospital of the Monterey Peninsula, the Naval Postgraduate School, the Presidio of Monterey), and light commercial uses.

In some portions of the project limits, residential development is set back from the highway and close by in others. The closest residences are about 100 to 150 feet from the highway.

In the eastern segment of the project limits, from State Route 1 to Toro County Park (post mile R4.4 to post mile 15.7), State Route 68 traverses past recreational/open space uses (including golf courses, the County Fairgrounds, Laguna Seca Raceway, and Toro County Park), the regional airport (Monterey Airport), rural to low-density residential development, and the Fort Ord National Monument (former Army base) property and open space.

Environmental Consequences

Short-term increases in noise from construction activities will occur in the vicinities of the work areas. Construction noise levels will vary for the types of equipment used by the contractor. Equipment to be used during project construction may include a crane, loader, drill rig, excavator, backhoe, dump trucks, concrete trucks, grinder, paver, roller, water trucks, traffic control trucks, and a low boy, among other potentially necessary equipment during construction.

Caltrans policy specifies that typical construction equipment should not generate noise levels in excess of 86 A-weighted decibels at 50 feet from the noise source. Potential construction-related noise levels are expected to be very short-term in duration and therefore are not expected to be adverse. [The following sentence has been modified since the draft environmental document was circulated.] However, construction activities during the nighttime period (9:00 p.m. to 6:00 a.m.) are

expected to be necessary for the project, which can adversely impact local residents' normal sleep activities. [The following text has been added since the draft environmental document was circulated.] As discussed in Section 1.4.1, Transportation Management Plan section, night work is anticipated in order to maintain one lane of travel at all times on State Route 68 through the project construction locations. Any full road closures or reversible one-lane direction control will take place during the evening and overnight hours at locations where necessary, for example, where the highway has one lane in each direction. In addition, night work may be necessary to mobilize equipment at the six culvert locations where trenchless methods will be used. Based on preliminary plans, construction work during the nighttime is anticipated during the majority of the construction period, or about 120 days of the total 165-day construction period. This estimate will be refined during the Construction phase of the project.

To minimize noise levels during nighttime hours, the construction contractor and resident engineer's binder will include specifications that construction work will be done during the daytime and, if construction is necessary after 9:00 p.m., that the noisiest activities will be done as early in the evening as possible. Further, construction activities will be required to adhere to Section 14-8.02 of Caltrans Standard Specifications, which requires the contractor to control and monitor noise from construction activities so that they do not exceed 86 A-weighted decibels maximum sound level at 50 feet from the job site noise source from 9:00 p.m. to 6:00 a.m. Additional standard noise minimization measures as provided below in the avoidance, minimization, and/or mitigation measures section will be included in the resident engineer's binder and implemented during construction, as specified in the noise analysis in the Air Quality, Greenhouse Gas, Noise, and Water Quality Technical Memorandum (August 2021).

The project construction activities have the potential to generate some vibration from the expected cut-and-cover and trenchless construction methods. The specific types of equipment used for each culvert construction location will be determined by the contractor, factoring in the particular subsurface soil types, the topography of the location, and hydrologic conditions, among other criteria. For either the cut-and-cover (trenching) or trenchless (jack and bore) construction methods, any vibration generated by construction equipment will be considered to be continuous, frequent intermittent events rather than transient or single isolated vibration events (Caltrans, Transportation, and Construction Vibration Guidance Manual April 2020).

In general, cut-and-cover methods will primarily entail cutting a trench through and/or along the highway to repair or remove the existing pipe equipment and install the new culvert pipes, inlets, and outlets as needed. Trenchless or jack and bore methods involve horizontal boring or drilling of a shaft below the highway or off-highway ground surface through which the replacement pipe culvert is pulled and/or pushed through to the replacement location. Various methods of pipe "jacking" through the underground shaft could be used for this process with different types of equipment that could potentially generate vibration. Land uses close to the culvert repair locations where trenchless construction methods are expected to be used

include homes at least 100 to 150 feet from the work sites (Culvert Locations 8, 9, and 13) and wooded open space (Culvert Locations 19, 20, and 23). No historic era resources are in proximity to the planned trenchless repair locations. The project construction activities will be temporary for short durations at the individual culvert repair/replacement locations, and those activities are not expected to generate substantial amounts of groundborne vibration that will otherwise adversely affect any residents or other sensitive receptors.

Caltrans will implement a public awareness campaign before project construction to alert area residents and businesses of the construction schedule; for example, when night work will be done and traffic management, including planned lane and ramp closures on State Route 68 and detour routes where needed (refer to Section 1.7, Transportation Management Plan).

Avoidance, Minimization, and/or Mitigation Measures

The following construction noise minimization measures will be included in the resident engineer's binder and implemented during construction:

N-1: The Caltrans District 5 Public Information Office, as advised by the project's resident engineer, will notify the public two weeks before scheduled construction activities that are expected to produce an adverse noise environment. Notice of the dates and duration of the construction activities will be published in local news media for the locations affected.

N-2: The construction contractor will shield loud pieces of stationary construction equipment if complaints are received from the public.

N-3: The construction contractor will locate portable generators, air compressors, and other loud equipment away from sensitive noise receptors as feasible.

N-4: The construction contractor will limit the grouping of major pieces of equipment operating in one area to the greatest extent feasible.

N-5: The construction contractor will use newer equipment that is quieter and will ensure that all equipment items have the manufacturer's 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 will be equipped with a muffler or baffle of a type recommended by the manufacturer.

N-6: The construction contractor and resident engineer will consult with District 5 noise staff if complaints are received during construction activities.

2.1.14 Population and Housing

The project will not alter the existing capacity or alignment of State Route 68; therefore, it will not induce unplanned population growth directly or indirectly. The

project will not displace people or housing units in the region. Considering this information, the following significance determinations have been made:

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

2.1.15 Public Services

The planned infrastructural repairs and replacements to culvert systems and the addition of new lighting and census station equipment will be within the existing alignment of State Route 68. No population growth or need for additional public services will result from the improvements within the project limits, as the sizes and lengths of the culvert replacement and repairs will be consistent with current design standards and the physical topography of soils and other conditions at the individual system locations. The project will not impact any existing or planned governmental facilities near the project location. Public access will be maintained on State Route 68 during construction activities, including access to existing governmental facilities in the vicinity of the project limits. Considering this information, the following significance determinations have been made:

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

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

2.1.16 Recreation

Various types of recreational facilities are adjacent to or in the immediate vicinity of the project limits of State Route 68, including several golf courses, parks (Toro County Park, local community parks), sports fields (Pacific Grove High School, Presidio of Monterey), and natural reserves (Morse Botanical Reserve). The project does not include any recreational components and will not generate an increase in population and a potential resultant demand for recreational facilities. Therefore, the project is not expected to affect existing recreational facilities directly or indirectly or cause increased demand for additional or expanded facilities.

The planned culvert and Transportation Management System facility improvements will be mostly within the existing state highway right-of-way. However, temporary construction easements to enable off-highway work during construction activities and permanent drainage easements for long-term facility maintenance will be required at some culvert locations. Although there are several recreational uses adjacent to culvert work locations (based on preliminary design information; for example, at Culvert Locations 3, 4, 6, 20. 21. 23, and 26), the easements will not impact the existing recreational uses or facilities adjacent to the highway. Refinement of any easement requirements for construction and maintenance of the culvert repair locations will be conducted during the Plans, Specifications, and Estimates phase of the project. Procedures for short-term and long-term right-of-way access permission of non-state property use will be implemented through Caltrans standard procedures.

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

Question—Would the project:	CEQA Significance Determinations for Recreation
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will 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 will not generate any additional population growth in the project area or region and, therefore, will not increase traffic volumes along the project route or increase vehicle miles traveled. Culvert repair/replacement and the addition of two census stations and replacement lighting facilities will not alter the existing highway alignment or capacity of State Route 68.

The planned improvements will not conflict with any existing or planned transportation-related plans, programs, or facilities in the region because the project will repair drainage infrastructure and install Transportation Management System equipment to improve traffic census data collection for highway operations management. The project is included in the Association of Monterey Bay Area Governments' 2021 Metropolitan Transportation Improvement Program (Federal Statewide Transportation Improvement Program), approved on April 16, 2021. The project is programmed for funding from the 2020 State Highway Operation and Protection Program, Roadway Preservation (program code 201.151).

No changes to the existing highway or adjoining roadway alignments, capacities (number of lanes or lane widths), or design features will be involved with the improvements; therefore, no design-related hazards or incompatible uses will be generated.

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**
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

Most of the project limits on State Route 68 is a two-to-four-lane divided conventional highway with left/right turn pockets, 12-foot travel lanes, and 4-to-10-foot shoulders. The portion of the route west of State Route 1 on the Monterey Peninsula is mostly one lane in each direction, with several sections of winding curves and limited sight distance. The route functions as a freeway between post miles 15.15 (west of Toro County Park) to Spreckels Boulevard just east of the Salinas River crossing, a segment of about 2.6 miles. State Route 68 intersects State Route 1 at two locations (as shown in Figure 1-3), splitting the project limits into two segments. Local rural residential roads and suburban streets intersect and parallel State Route 68 at various locations throughout the project limits.

Environmental Consequences

Emergency access will be maintained along State Route 68 during project construction in accordance with the Transportation Management Plan that will be implemented during construction as described in Section 1.4.1. Traffic management during construction is expected to involve temporary single-lane closures or other lane modifications and construction site strategies to maintain traffic access along State Route 68 at most of the culvert repair locations. Full ramp closures are currently anticipated to be necessary at two of the culvert locations—Culvert Location 14A (post mile R4.14) near Fairground Road and Culvert Locations 26A and B (post mile 15.65) at Toro County Park—because the ramps on and off the highway in these locations have one lane. Any full closure locations and affiliated detour routes will be determined as part of the preparation of the Transportation Management Plan that will be implemented during the construction phase. During the day, one lane in each direction will be maintained for traffic access. Travel lane

closures or reversible one-lane direction control in the construction work locations will occur at night-time when traffic levels are lower than the daytime peak periods. Lane closures will be implemented in accordance with Caltrans' lane closure charts to be included in the construction contract specifications.

The public will be notified of planned construction traffic management strategies through various methods as part of a public awareness campaign and motorist information on the project route. The public awareness campaign may include strategies such as press releases and media alerts, advertisements, Caltrans websites and other highway traffic-related internet applications, and/or a telephone hotline. Traveling motorist information may include tools such as on-highway and local street changeable message signs, construction area signs, and radio advisories. Once installed, the infrastructural repairs within the project limits will not have any long-term effects on emergency access on State Route 68 and will improve drainage, lighting, and traffic management.

Avoidance, Minimization, and/or Mitigation Measures

The project will implement standard Caltrans measures, including a Transportation Management Plan during construction.

2.1.18 Tribal Cultural Resources

Considering the information in the Cultural Resources Screened Undertaking Memorandum for State Route 68 Drainage Improvements dated November 18, 2021, the following significance determinations have been made. Caltrans conducted Native American consultation as required under Assembly Bill 52 (Public Resources Code 21080.3.1 and 21084.3(c)) in accordance with the CEQA Initial Study preparation. A Native American Consultation group was composed of individuals with knowledge of the cultural resources and prior studies of the project area. Results of the consultation activities conducted during the current Project Approval and Environmental Document phase of the project concluded with concurrence that the project is expected to avoid known archaeological resources. Although no specific impacts to cultural resources are expected, participants in the consultation group representing Native American interests requested that a Native American monitor be present during excavation work at the project sites as a precaution. Caltrans will continue working with the tribes to address their concerns and to determine specific locations of the project work where the tribes consider monitoring to be needed. Consultation with the tribes is ongoing.

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

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

2.1.19 Utilities and Service Systems

Considering the information in the Draft Project Report, November 2021, and Caltrans Landscape Recommendations Memorandum dated (August 30, 2021), the following significance determinations have been made regarding utilities and service systems:

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	**Less Than Significant Impact**
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	**Less Than Significant 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**

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
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

Various types of utility lines are located in the project limits within and adjacent to the state right-of-way. Utilities include natural gas lines, electrical lines (overhead and underground), telecommunication lines (overhead and underground), water lines, and sewer lines.

Environmental Consequences

The planned culvert work will repair and replace existing culverts in poor condition, will install two new census stations, and will replace lighting equipment at post mile R4.04 near Fairground Road. The replacement lighting features will include the removal of a double-arm electrolier (support for electric lamps), replacement of two existing electroliers and lights, and installation of two new electroliers, new electrical conduit, conductors, pull boxes, and replacement bulbs.

Utility relocations or alterations of utility functions are not expected based on preliminary design work and investigations. The project will not alter the alignment of existing culvert systems. However, locations of existing utilities will be confirmed during the Plans, Specifications, and Estimates phase of the project, and with that information, Caltrans can confirm whether or not relocations will be necessary. Caltrans will continue communication with the utility owners—Pacific Gas and Electric Company, American Telephone and Telegraph Corporation, and city and county utility departments, among others—throughout the Plans, Specifications, and Estimates phase and the construction phase of the project to ensure that construction methods implemented for the project work locations will enable protection in place of existing utilities and that no conflicts occur with utility services or equipment.

Construction activities are expected to use electricity and natural gas to power equipment, tools, and vehicles as needed for the repairs and other improvements throughout the construction period (expected to be about five months). Consumption of utilities will be relatively minor for short-term periods and location-specific for each of the construction sites for replacement or repair of the culverts, installation of the

two census stations, and replacement of electrical lighting facilities near the Fairground Road intersection.

Minor amounts of water will be used for various construction activities throughout the construction period at the project locations. Water will also be needed for the establishment and periodic irrigation maintenance of landscape plantings and tree replanting mitigation areas for up to three and a half years after completion of construction. Caltrans implements water conservation elements as part of the standard procedures for landscape planting and irrigation design processes. Specifically, Caltrans highway landscape projects are required to comply with either the statewide Model Water Efficient Landscape Ordinance or local ordinances for water conservation where applicable.

The landscape planting and irrigation design for the project's replacement plantings will, therefore, include methods to minimize potable usage for supplemental irrigation for plant establishment, such as the use of recycled, non-potable water where available, drip irrigation, and low water use plant species that are suitable for the micro-climates of the landscape areas. Caltrans landscape planning applies a goal of a 50 percent reduction in water usage from the year 2013, in accordance with the requirements of California executive orders issued under the administration of Governor Edmund Gerald Brown Jr. Therefore, the project will be expected to have sufficient water supplies to support project restoration landscaping in the long-term during dry or multiple dry years through the use of efficient and minimal water usage practices and will not substantially reduce local and regional water supplies.

Project construction activities will generate minor amounts of solid waste that will not overwhelm the capacity of existing waste management facilities. Recyclable materials will be recycled, and waste materials will be disposed of in accordance with all state and federal requirements. No sewage facilities or services will be affected by or needed for the project construction activities or for long-term maintenance of the project drainage and other infrastructural improvements. Therefore, the project will not substantially affect wastewater treatment in the local project area and the region as the project construction activities will be short-term.

The main purpose of the project is to restore the existing drainage infrastructure at selected locations along State Route 68 and will not cause changes in land uses or other environmental effects that will necessitate additional drainage system capacity.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed.

2.1.20 Wildfire

Information in this section is based on the California Department of Forestry and Fire Protection's Fire Hazard Severity Zone Mapping tool and Monterey County geographical information systems mapping.

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

Affected Environment

State Route 68 west of State Route 1 on the Monterey Peninsula is mostly one lane in each direction, with several sections of winding curves, limited sight distance, and intersecting local residential roads. From State Route 1 to the eastern project limit near Toro County Park, State Route 68 is a two-to-four-lane divided conventional highway with left and right turn pockets and 4-to-10-foot shoulders. State Route 68 intersects State Route 1 at two locations (as shown in Figure 1-3), splitting the project limits into two segments. Local rural residential roads and suburban streets intersect and parallel State Route 68 at various locations throughout the project limits.

The project limits of State Route 68 are within Very High, High, and Medium Fire Severity Zones, according to the California Department of Forestry and Fire Protection's Fire Hazard Severity Zone Mapping tool and Monterey County geographical information systems mapping. For State Route 68 in and around the project limits, land on the north side of the highway is in High and Very High Fire Severity Zones, including all of the Monterey Peninsula; the lands on the south side of the highway are classified as Medium Fire Severity Zones. Most of the project limits transect fire-susceptible wooded suburban and rural residential land uses and open spaces with woodland, scrub, and grassland vegetation. California is also currently experiencing unprecedented drought conditions that further increase the potential for accidental fire hazard events. According to the Caltrans Climate Change

Vulnerability Assessment for District 5, the fire severity levels for the project and surrounding region are forecast to increase over the century due to climate change factors (Caltrans Climate Change Technical Report, November 2021).

Environmental Consequences

The project does not involve changes in land use, such as new urban or suburban development. The planned drainage and Transportation Management System repairs and improvements will extend the life of the highway drainage, lighting, and traffic management infrastructure and will, therefore, not expose residents or businesses to increased risk of wildfire in the long term or permanently alter existing wildfire hazards in the region. Once installed, the drainage, lighting, and census station improvements will be mostly underground and will require less maintenance than the existing facilities.

In addition, the project will not alter existing drainage patterns or potentially increase downstream flooding or landslides as the culverts to be replaced will be in about the same locations as the existing drainage pipes. Design standards will be implemented in accordance with the roadway and hydraulic and topographical conditions at each culvert location to control runoff and ensure slope protection. In addition, Best Management Practices for stormwater management will be implemented as part of Caltrans' standard procedures and measures during construction activities and postconstruction activities (also refer to the discussions in Sections 2.1.9, Hazards and Hazardous Materials, and Section 2.1.10 Hydrology and Water Quality).

However, because some of the culvert repair locations are in high fire severity zones with woodland and other highly flammable vegetation in and around the culvert repair locations, construction activities at the culvert repair locations will have the potential to unintentionally cause brushfire from the use of fuel-powered and electrical construction equipment and vehicles. During construction, vegetation removal will be necessary at some of the culvert locations to enable access by construction equipment, vehicles, and supplies to the work sites. The project will implement Caltrans Standard Specifications for fire prevention and safety as precautionary measures to prevent fire-related incidents during construction in accordance with the California Division of Occupational Safety and Health's Construction Safety Orders, Fire Protection and Prevention Guidance. Vegetation removal will be planned and conducted using techniques to avoid and minimize unintentional fire hazards.

Construction of the culvert repairs is expected to necessitate temporary single-lane closures or other lane modifications and construction site strategies to maintain traffic access along State Route 68 at most of the culvert repair locations. As discussed in Section 2.1.17 Transportation, it is expected that one lane in each direction will be maintained during the daytime for traffic access at most of the culvert repair locations where roadway lane configurations allow. Full intersection ramp closures may be necessary near some of the culvert repair locations; closures

are currently anticipated for Location 14A (post mile R4.14) near Fairground Road and Locations 26A and B (post mile 15.65) at Toro County Park.

Any full closure locations, roadway instructional signage, and/or detour routes will be determined as necessary in the Transportation Management Plan that will be implemented during the construction phase (see also Section 1.4.1 Build Alternative). Travel lane closures or reversible one-lane direction control in the construction work locations will occur at night-time when traffic levels are lower than the daytime peak periods. Access for emergency vehicles will be maintained along State Route 68 within the project limits during construction as will be specified in the Transportation Management Plan; therefore, the project will not impair an emergency response plan or evacuation plan. No long-term effects on emergency response or evacuation plans will occur after completion of project construction at the project infrastructure locations as the traffic management lane closures will be temporary during construction.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed.

2.1.21 Mandatory Findings of Significance

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

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	**No Impact**

The following discussion provides information addressing questions A and B in the checklist above. Regarding question C, the project will repair and replace existing drainage infrastructure, improve lighting facilities at one location and add new Transportation Management System equipment (traffic census stations). The potential environmental effects of the project will occur during project construction activities. The planned improvements will not cause substantial impacts on human beings.

Affected Environment

The project will affect environmental resources within and immediately surrounding post miles 0.2 to 15.7 on State Route 68 in Monterey County. The scope of the project will be limited to repairing and replacing existing drainage culvert infrastructure, replacing lighting equipment at post mile R4.04, and installing two new census stations under existing highway pavement within the project limits. Related functions for project construction will include the use of staging areas for equipment and materials, temporary construction easements at selected properties outside of the state highway right-of-way, and replacement of guardrail at one location.

Environmental Consequences

Overall, the project is not expected to substantially degrade the quality of the environment. The project will not have a substantial adverse effect on scenic vistas or substantially alter the existing appearance of the project repair locations. The planned drainage infrastructure, lighting repairs, and additional elements will incrementally increase the existing utilitarian appearance of the project work areas that will be minimized with the implementation of the avoidance and minimization measures prescribed in Section 2.1.1 Aesthetics. Although the project is within portions of State Route 68 designated as a Scenic Highway and a portion determined eligible for designation, it is expected that after project construction and revegetation plantings, the project will generally be unnoticed by travelers on State Route 68.

Project construction activities will cause temporary and permanent impacts to habitat for fish and wildlife species, particularly regulated wetlands and other jurisdictional waters, sensitive species, oak woodland, and Monterey pine forest plant communities, and the removal of coast live oaks and Monterey pines at selected culvert locations. The project has been designed to avoid and minimize impacts to

biological resources as much as feasible. For example, replacement of the culvert infrastructure is planned at existing capacities in most locations rather than increasing pipe diameters or lengths in accordance with current design standards, which will potentially increase the impact footprints.

Compensatory mitigation measures will be implemented to provide replacement habitat for California tiger salamander and California red-legged frog, and revegetation with replacement plantings of coast live oaks and Monterey pine trees at ratios consistent with jurisdictional regulations. Additional avoidance and minimization measures will be implemented to further reduce potential effects during construction on biological resources, as provided in Section 2.1.4 Biological Resources.

Some greenhouse gas emissions will occur during construction from equipment, processing of construction materials, construction vehicle usage, and public vehicles idling during minor traffic delays during construction. Impacts will be less than significant with the implementation of Caltrans standard specifications, Best Management Practices, and the avoidance and minimization measures (Measures GHG-1 through 9) prescribed in Section 2.1.8 Greenhouse Gas Emissions.

The project will not impact any known archaeological or historic era resources and, therefore, will not eliminate any important examples of the major periods of California history or pre-history.

With the implementation of Caltrans standard specifications, standard special provisions, Best Management Practices, and mitigation measures, impacts to environmental resources will be less than significant.

The project will not have cumulatively considerable effects on the environmental resources of the project study area and vicinity in consideration of past, current, and reasonably foreseeable future projects with the implementation of Caltrans standard specifications, standard special provisions, Best Management Practices, and mitigation measures as prescribed herein. The potential for adverse cumulative impacts to California red-legged frogs and California tiger salamanders and their habitats is estimated to be very low considering the relatively small amount of potential habitat of each that will be affected in relation to the total amount of habitat that occurs in the region.

Compensatory mitigation, as provided in Section 2.1.4 Biological Resources, will be implemented to replace habitat for California red-legged frogs and California tiger salamanders and for impacts to Monterey pines and coast live oak trees that will be removed as part of project construction. In addition, no adverse cumulative impacts to Yadon's piperia critical habitat or other special-status plant or animal species are expected. The project is not expected to substantially contribute to adverse cumulative impacts to jurisdictional waters and riparian habitat because the project will implement replacement habitat onsite to mitigate in accordance with regulatory permits for loss of jurisdictional waters and riparian habitat. Therefore, with the

implementation of mitigation, avoidance, and/or minimization measures prescribed herein, the project's potential contribution to cumulative impacts will be less than significant.

Avoidance, Minimization, and/or Mitigation Measures

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

Appendix A Title VI Policy Statement

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

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

Making Conservation a California Way of Life.

September 2021

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a nondiscriminatory manner.

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

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi .

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at 1823 14th Street, MS-79, Sacramento, CA 95811; PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

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

Appendix B Preliminary Project Plans

This appendix contains the preliminary project plans of the planned culvert, lighting, and census station improvements on aerial photography base maps. The Areas of Potential Impact are outlined for each of the improvement locations. [The following sentence has been updated since the draft environmental document was circulated.] Note: culvert repair Location 5 was removed from the project during the preliminary design phase, and the culvert at Location 12 failed and was repaired in April 2022 as an emergency project.

The abbreviated notations on the plans are spelled out as follows:

API: Area of Potential Impact

CSP: Corrugated Steel Pipe

FES: Flared End Section

HDPE: High-Density Polyethylene

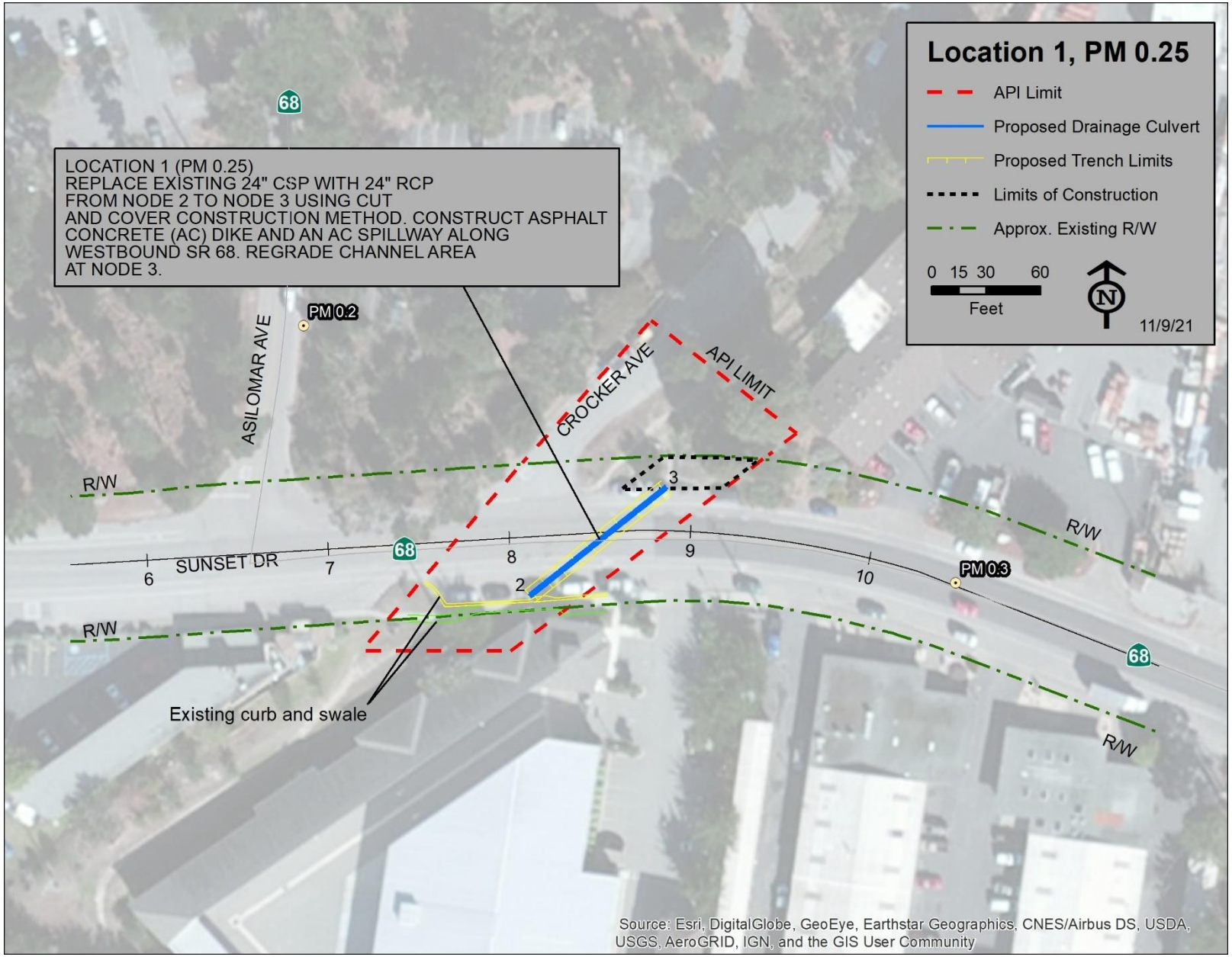
PM: Post Mile

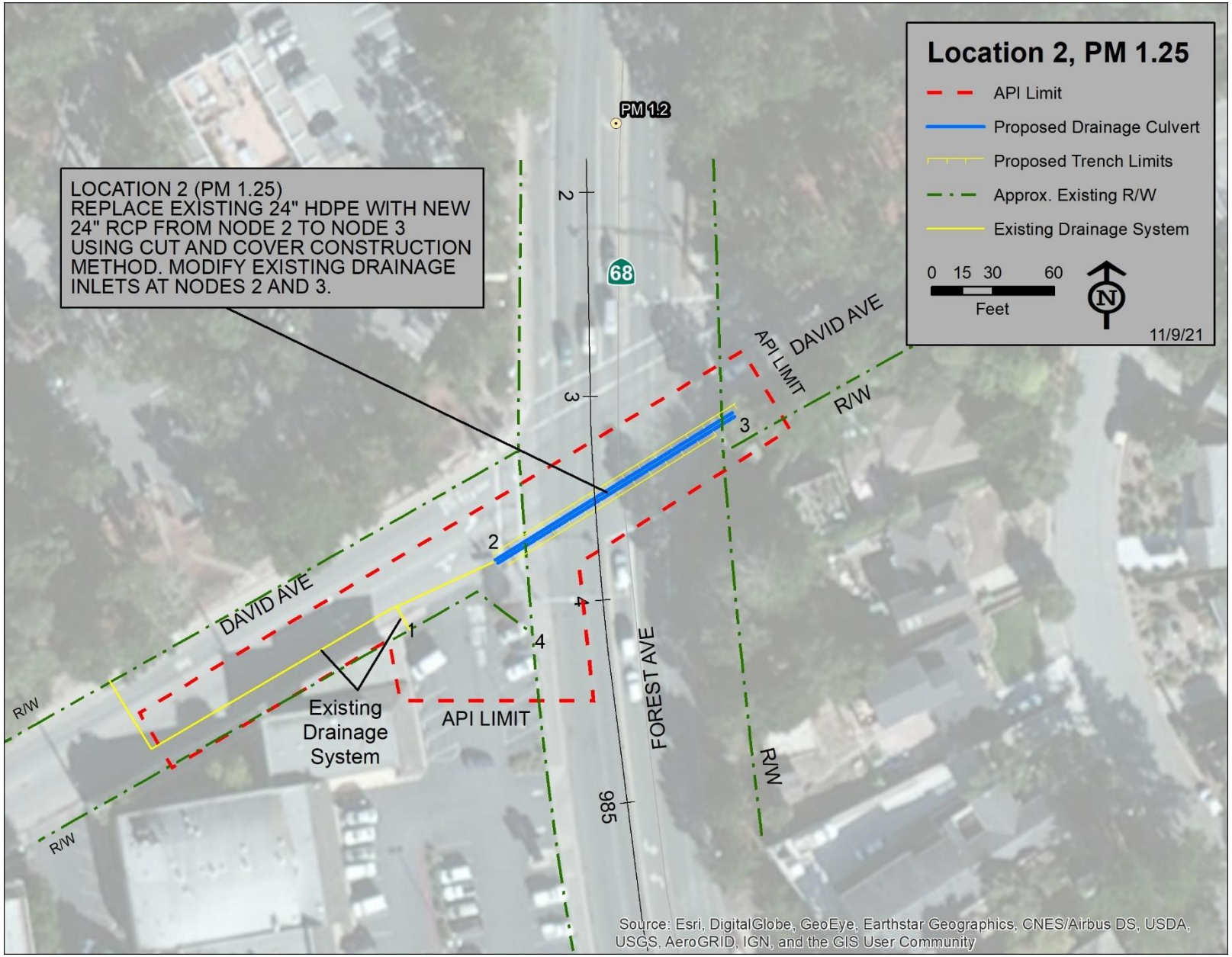
R/W: Right-of-Way (For State Highway)

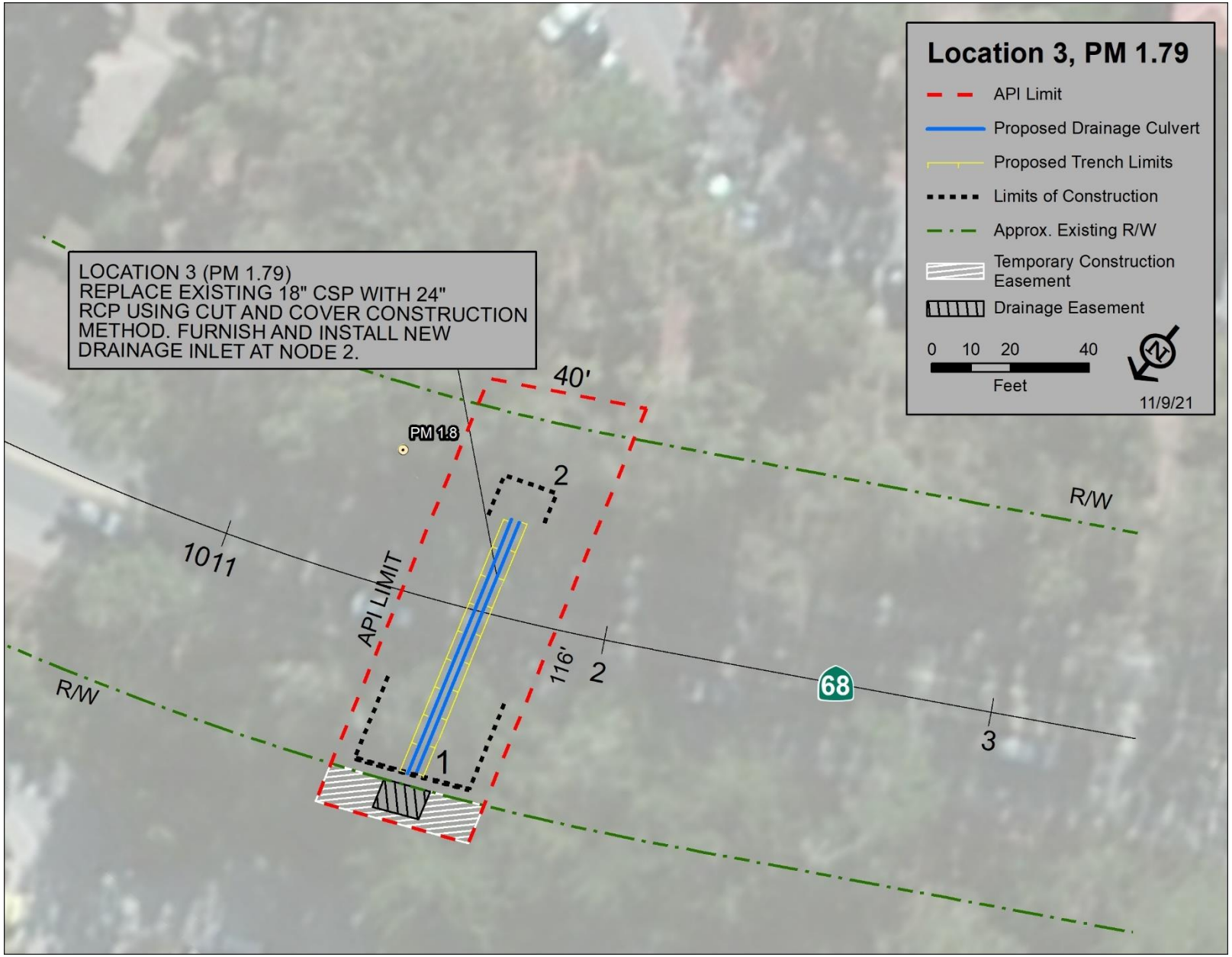
RCP: Reinforced Concrete Pipe

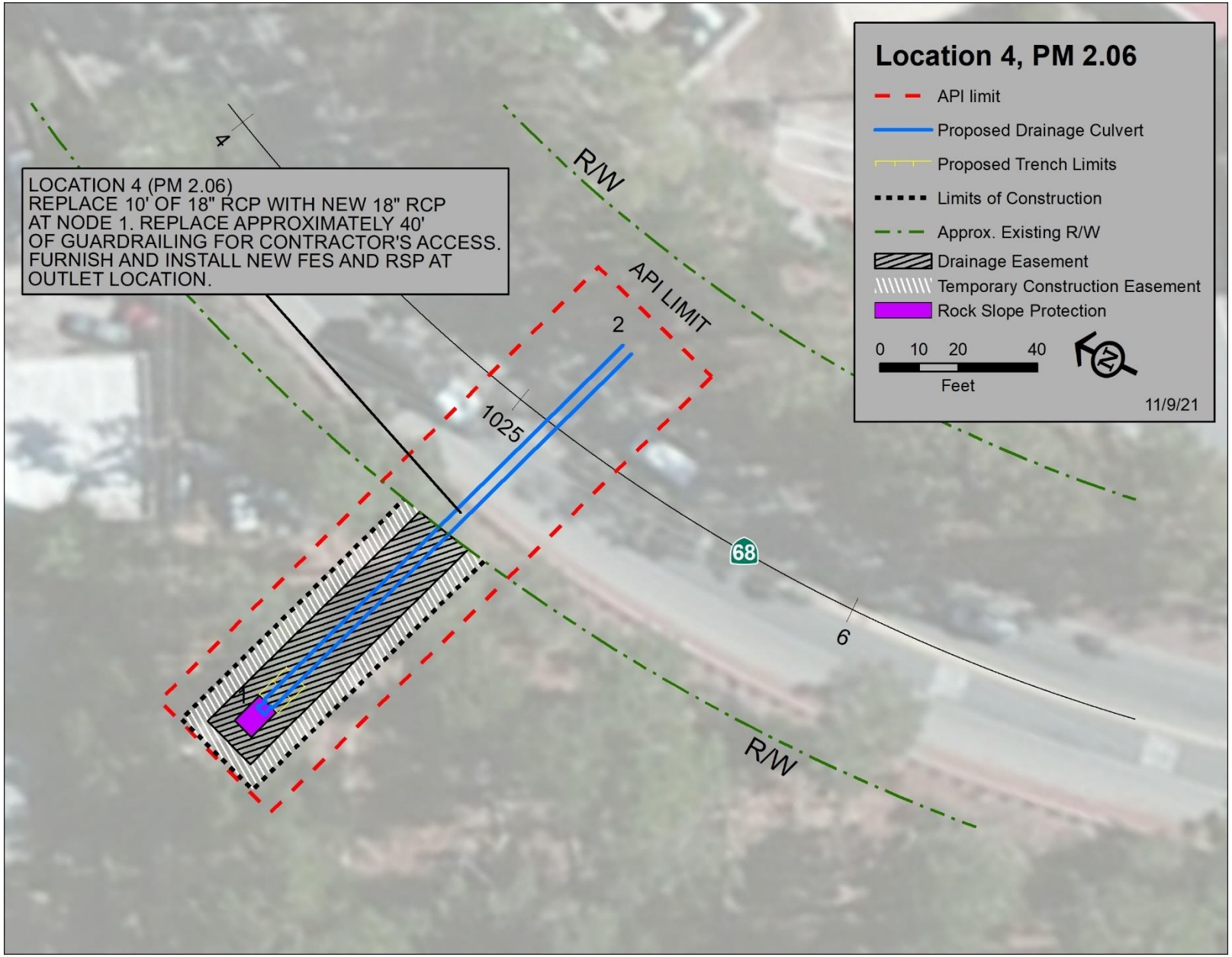
RSP: Rock Slope Protection

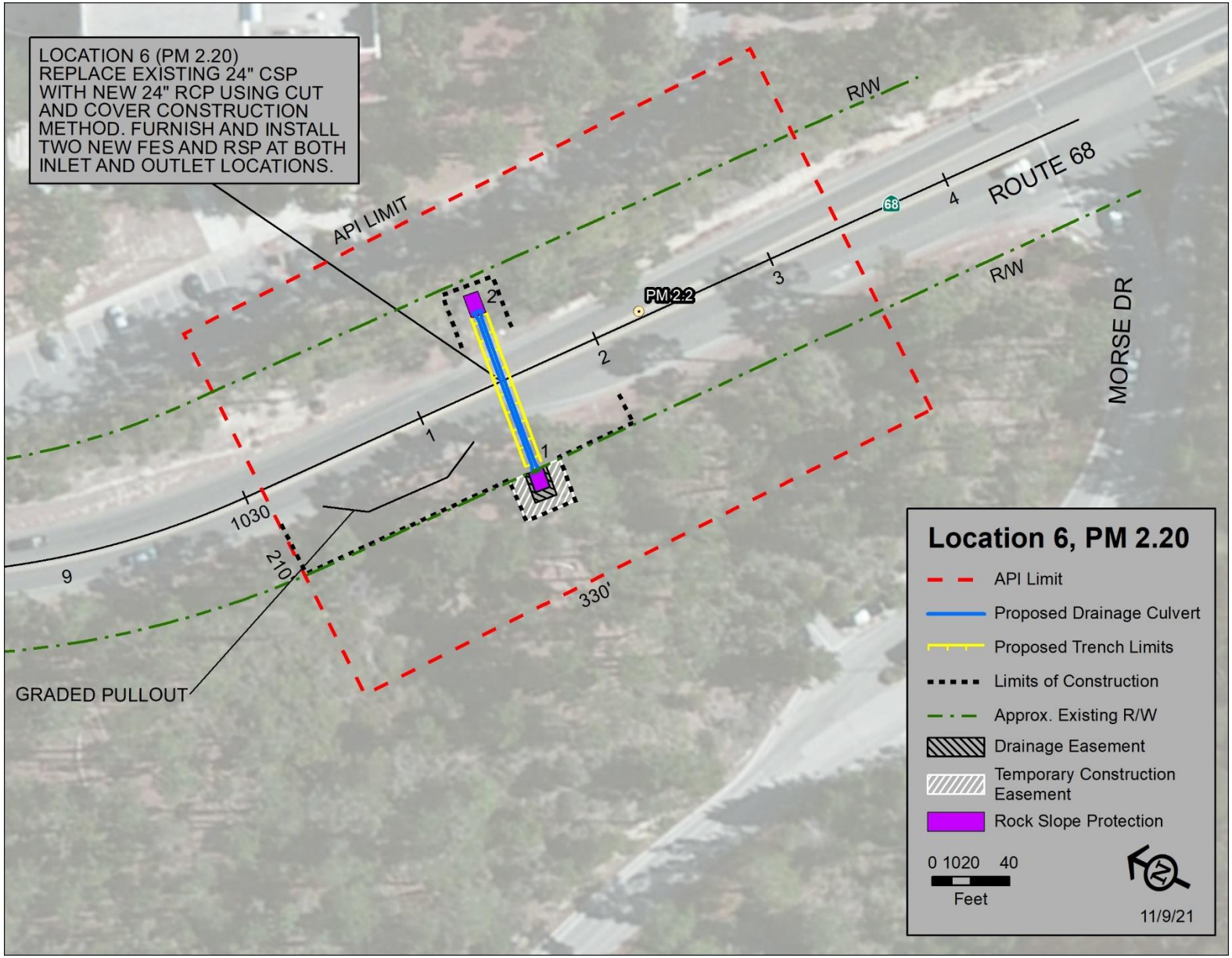
TMS: Transportation Management System

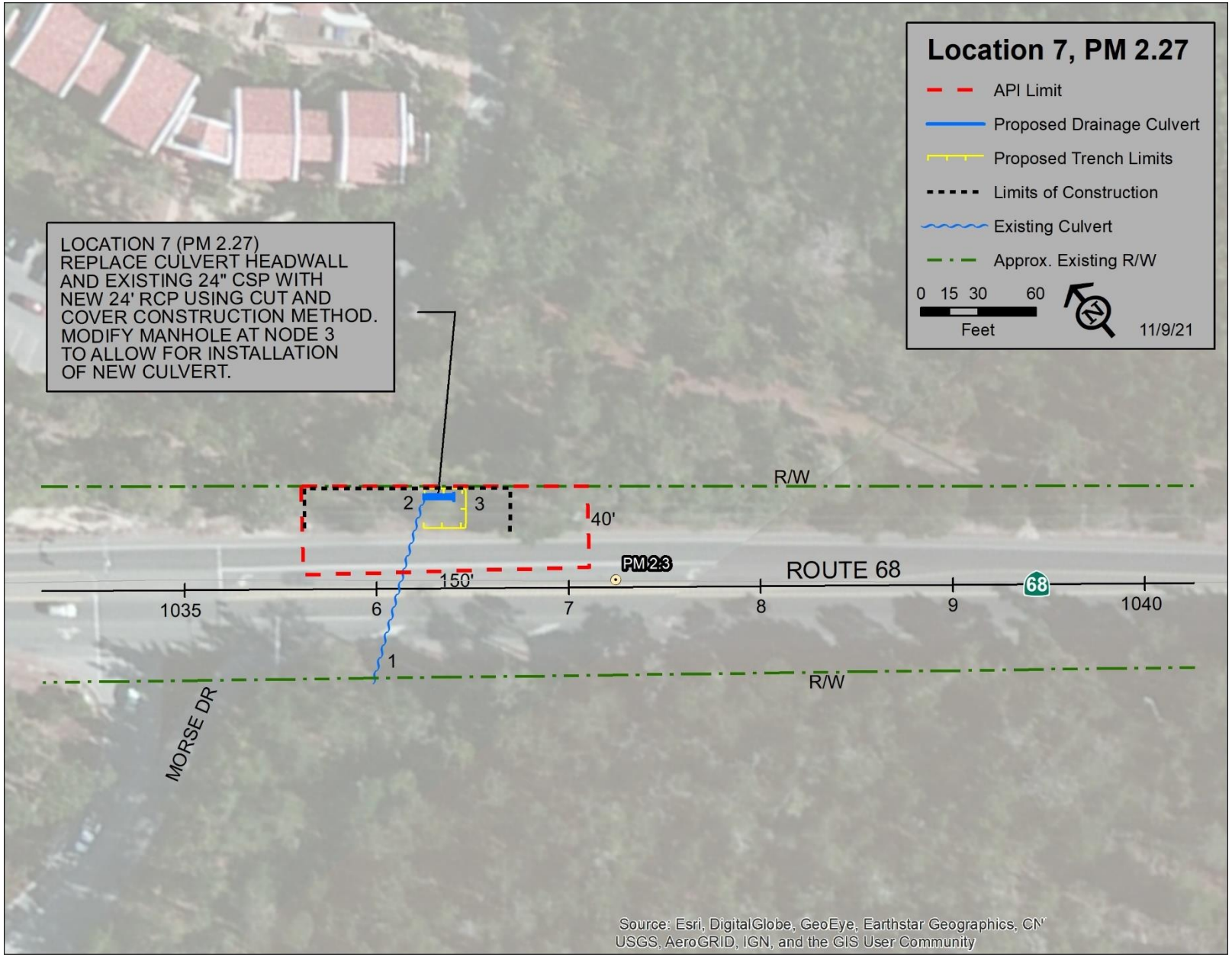

Location 1, PM 0.25
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
0 15 30 60
Feet
N
11/9/21
LOCATION 1 (PM 0.25)
REPLACE EXISTING 24" CSP WITH 24" RCP
FROM NODE 2 TO NODE 3 USING CUT
AND COVER CONSTRUCTION METHOD. CONSTRUCT ASPHALT
CONCRETE (AC) DIKE AND AN AC SPILLWAY ALONG
WESTBOUND SR 68. REGRADE CHANNEL AREA
AT NODE 3.
68
PM 0.2
ASILOMAR AVE
CROCKER AVE
API LIMIT
R/W
SUNSET DR
6
7
8
9
10
2
3
PM 0.3
Existing curb and swale
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

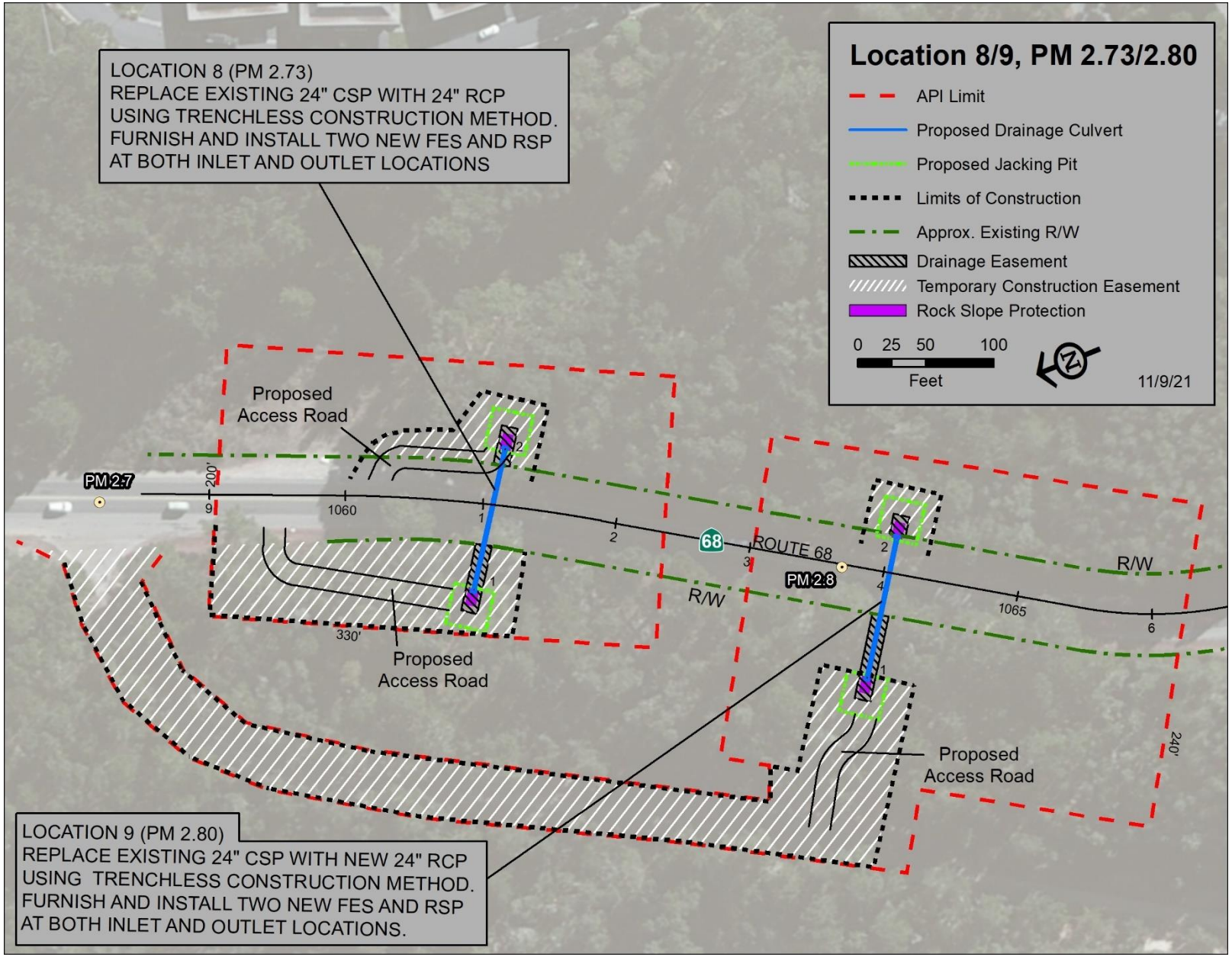

Location 2, PM 1.25
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Approx. Existing R/W
Existing Drainage System
0 15 30 60
Feet
11/9/21
LOCATION 2 (PM 1.25)
REPLACE EXISTING 24" HDPE WITH NEW 24" RCP FROM NODE 2 TO NODE 3 USING CUT AND COVER CONSTRUCTION METHOD. MODIFY EXISTING DRAINAGE INLETS AT NODES 2 AND 3.
PM 1.2
68
DAVID AVE
API LIMIT
R/W
FOREST AVE
Existing Drainage System
API LIMIT
985
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

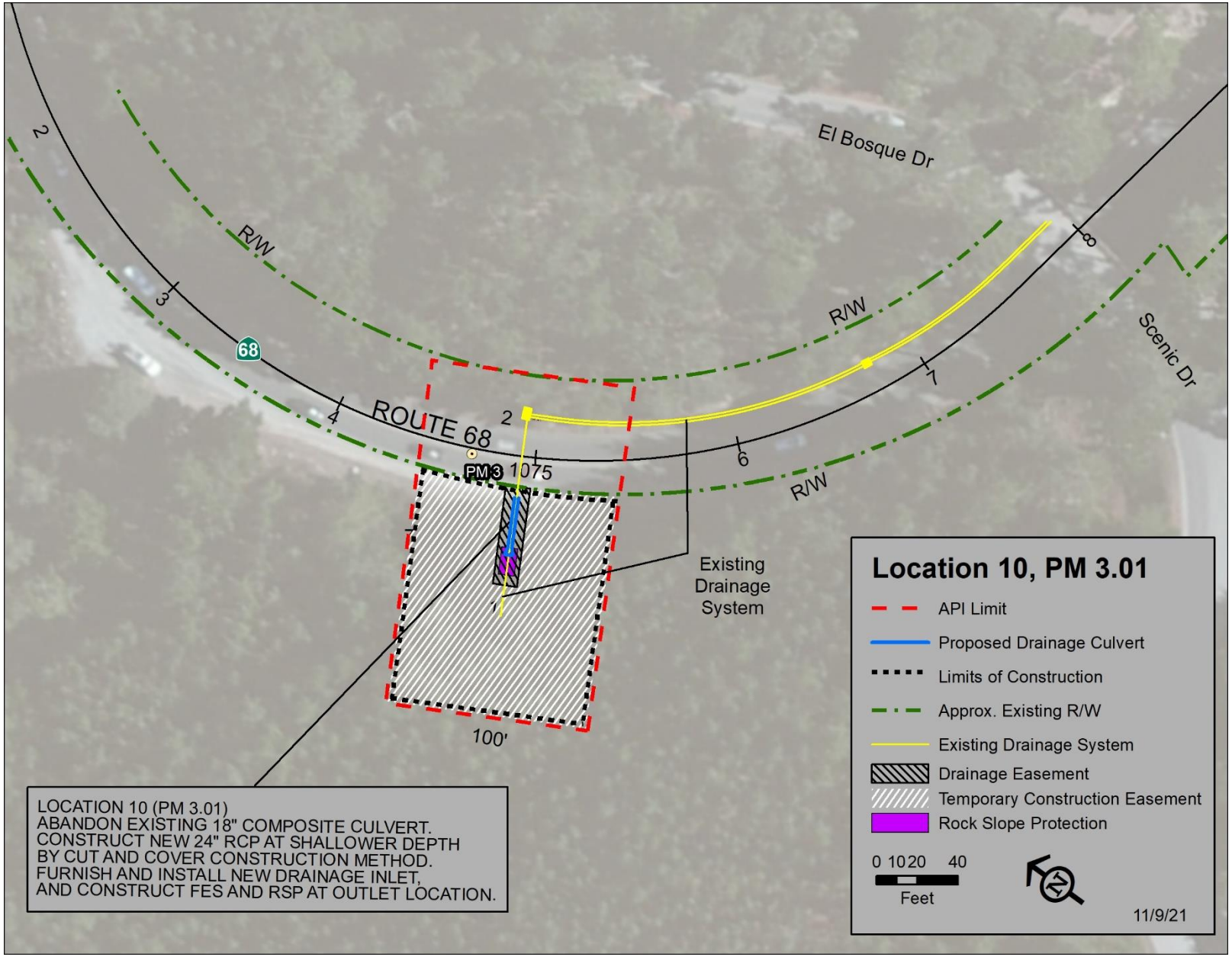

Location 3, PM 1.79
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Temporary Construction Easement
Drainage Easement
0 10 20 40
Feet
11/9/21
LOCATION 3 (PM 1.79)
REPLACE EXISTING 18" CSP WITH 24" RCP USING CUT AND COVER CONSTRUCTION METHOD. FURNISH AND INSTALL NEW DRAINAGE INLET AT NODE 2.
40'
PM 1.8
2
R/W
1011
API LIMIT
116'
2
68
3
R/W
1

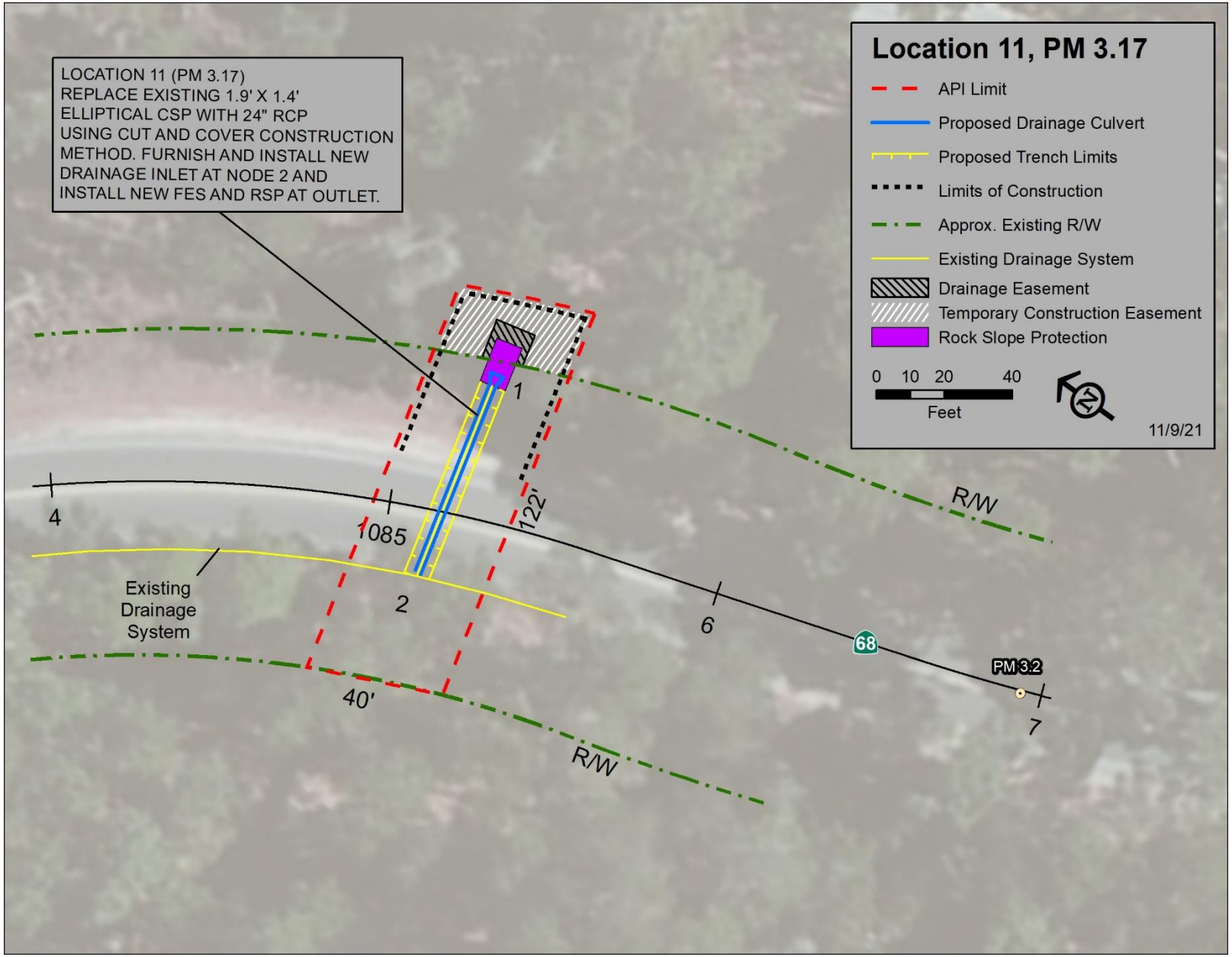

LOCATION 4 (PM 2.06)
REPLACE 10' OF 18" RCP WITH NEW 18" RCP
AT NODE 1. REPLACE APPROXIMATELY 40'
OF GUARDRAILING FOR CONTRACTOR'S ACCESS.
FURNISH AND INSTALL NEW FES AND RSP AT
OUTLET LOCATION.
4
R/W
API LIMIT
2
1025
68
6
R/W
Location 4, PM 2.06
API limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0 10 20 40
Feet
11/9/21

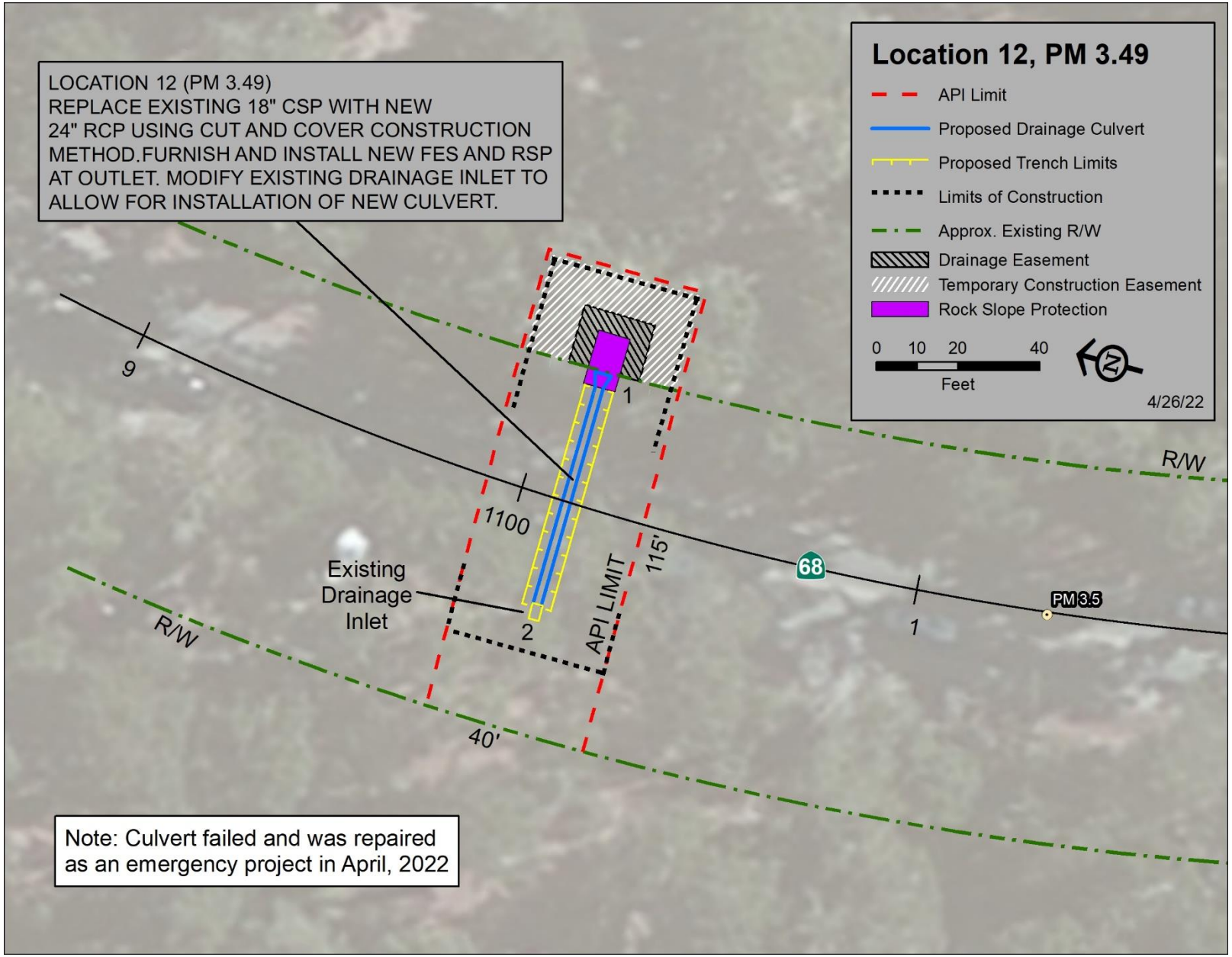

LOCATION 6 (PM 2.20)
REPLACE EXISTING 24" CSP WITH NEW 24" RCP USING CUT AND COVER CONSTRUCTION METHOD. FURNISH AND INSTALL TWO NEW FES AND RSP AT BOTH INLET AND OUTLET LOCATIONS.
API LIMIT
R/W
ROUTE 68
68
PM 2.2
MORSE DR
GRADED PULLOUT
1030
210'
330'
Location 6, PM 2.20
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0 1020 40
Feet
11/9/21

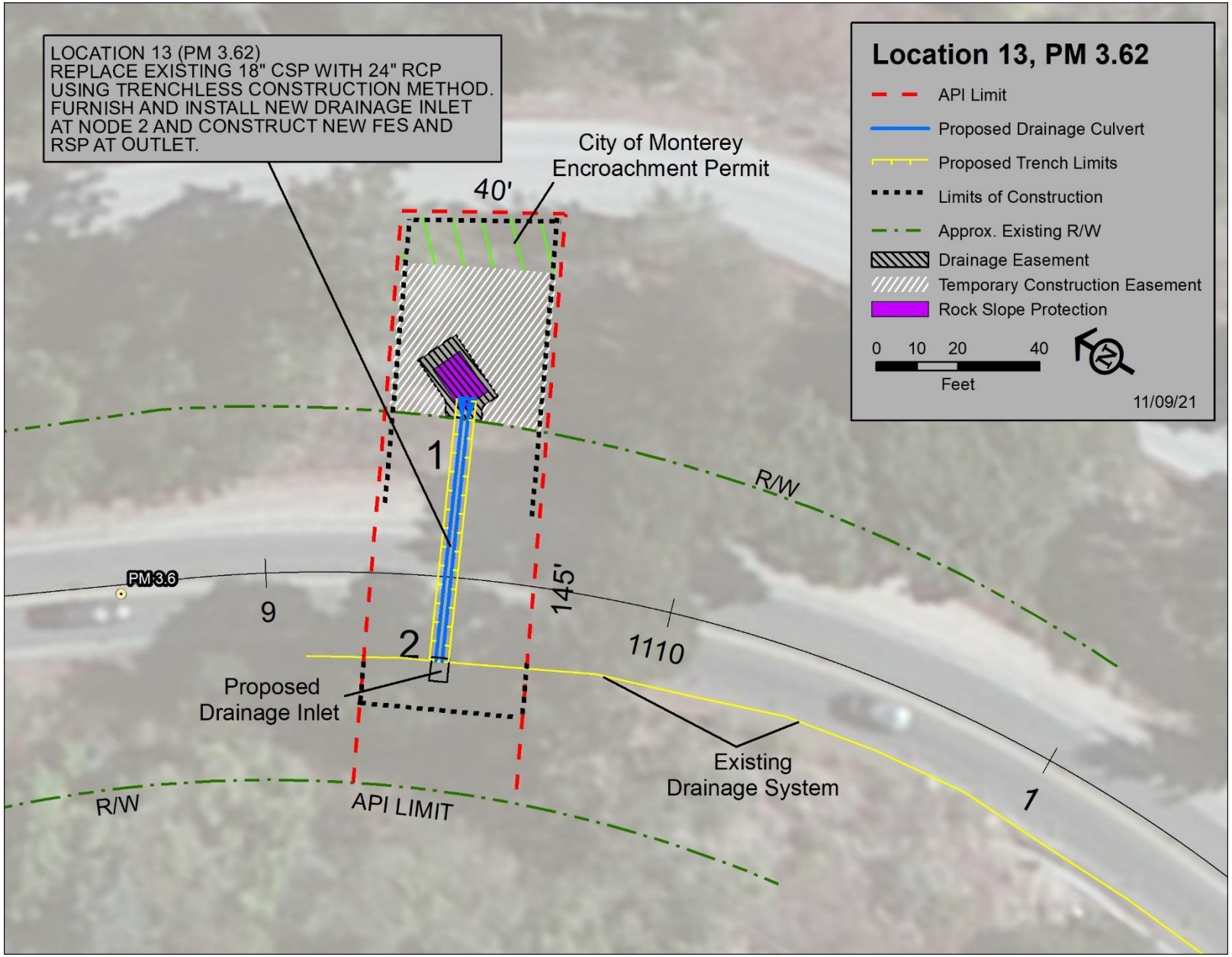

Location 7, PM 2.27
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Existing Culvert
Approx. Existing R/W
0 15 30 60
Feet
11/9/21
LOCATION 7 (PM 2.27)
REPLACE CULVERT HEADWALL
AND EXISTING 24" CSP WITH
NEW 24' RCP USING CUT AND
COVER CONSTRUCTION METHOD.
MODIFY MANHOLE AT NODE 3
TO ALLOW FOR INSTALLATION
OF NEW CULVERT.
R/W
2
3
40'
PM 2.3
150'
ROUTE 68
68
1035
6
7
8
9
1040
1
R/W
MORSE DR
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CN
USGS, AeroGRID, IGN, and the GIS User Community

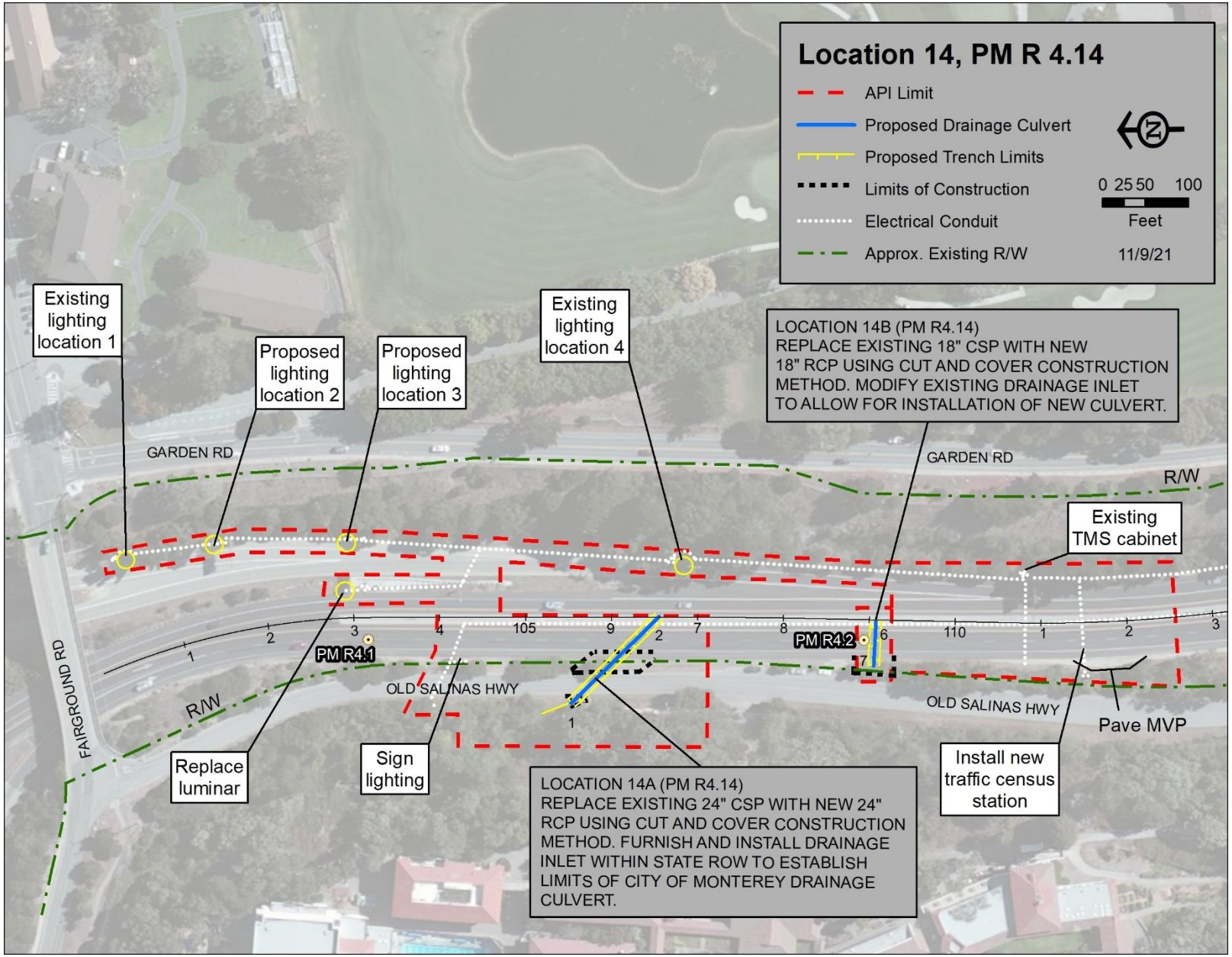

LOCATION 8 (PM 2.73)
REPLACE EXISTING 24" CSP WITH 24" RCP
USING TRENCHLESS CONSTRUCTION METHOD.
FURNISH AND INSTALL TWO NEW FES AND RSP
AT BOTH INLET AND OUTLET LOCATIONS
Location 8/9, PM 2.73/2.80
API Limit
Proposed Drainage Culvert
Proposed Jacking Pit
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0 25 50 100
Feet
11/9/21
Proposed Access Road
PM 2.7
200'
1060
330'
Proposed Access Road
68
ROUTE 68
PM 2.8
R/W
R/W
1065
240'
Proposed Access Road
LOCATION 9 (PM 2.80)
REPLACE EXISTING 24" CSP WITH NEW 24" RCP
USING TRENCHLESS CONSTRUCTION METHOD.
FURNISH AND INSTALL TWO NEW FES AND RSP
AT BOTH INLET AND OUTLET LOCATIONS.

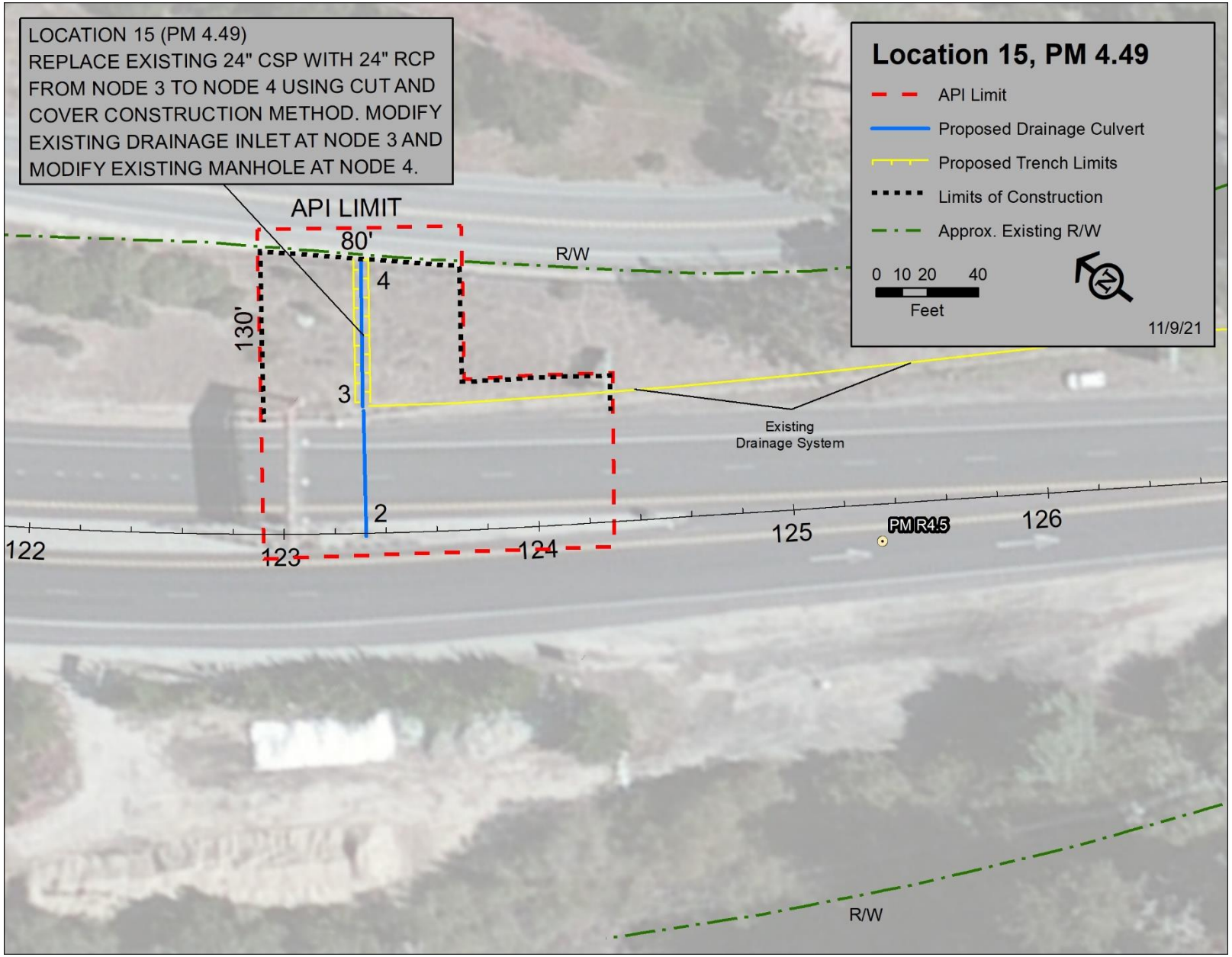

El Bosque Dr
Scenic Dr
R/W
R/W
R/W
ROUTE 68
68
PM 3
1075
2
3
4
6
7
8
Existing
Drainage
System
100'
LOCATION 10 (PM 3.01)
ABANDON EXISTING 18" COMPOSITE CULVERT.
CONSTRUCT NEW 24" RCP AT SHALLOWER DEPTH
BY CUT AND COVER CONSTRUCTION METHOD.
FURNISH AND INSTALL NEW DRAINAGE INLET,
AND CONSTRUCT FES AND RSP AT OUTLET LOCATION.
Location 10, PM 3.01
API Limit
Proposed Drainage Culvert
Limits of Construction
Approx. Existing R/W
Existing Drainage System
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0 10 20 40
Feet
11/9/21

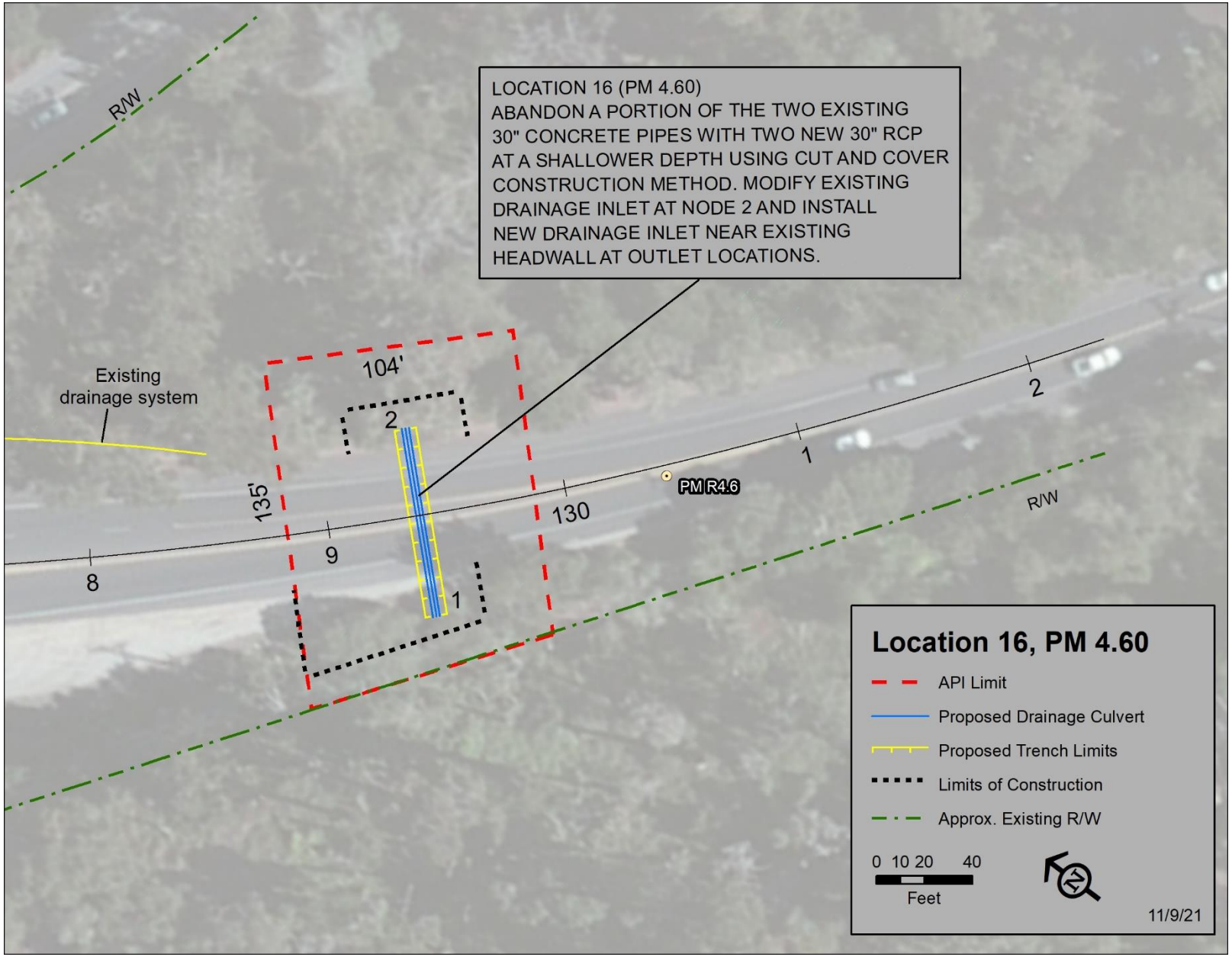

LOCATION 11 (PM 3.17)
REPLACE EXISTING 1.9' X 1.4'
ELLIPTICAL CSP WITH 24" RCP
USING CUT AND COVER CONSTRUCTION
METHOD. FURNISH AND INSTALL NEW
DRAINAGE INLET AT NODE 2 AND
INSTALL NEW FES AND RSP AT OUTLET.
Location 11, PM 3.17
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Existing Drainage System
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0 10 20 40
Feet
11/9/21
1
2
4
6
7
1085
122'
40'
R/W
R/W
Existing
Drainage
System
68
PM 3.2

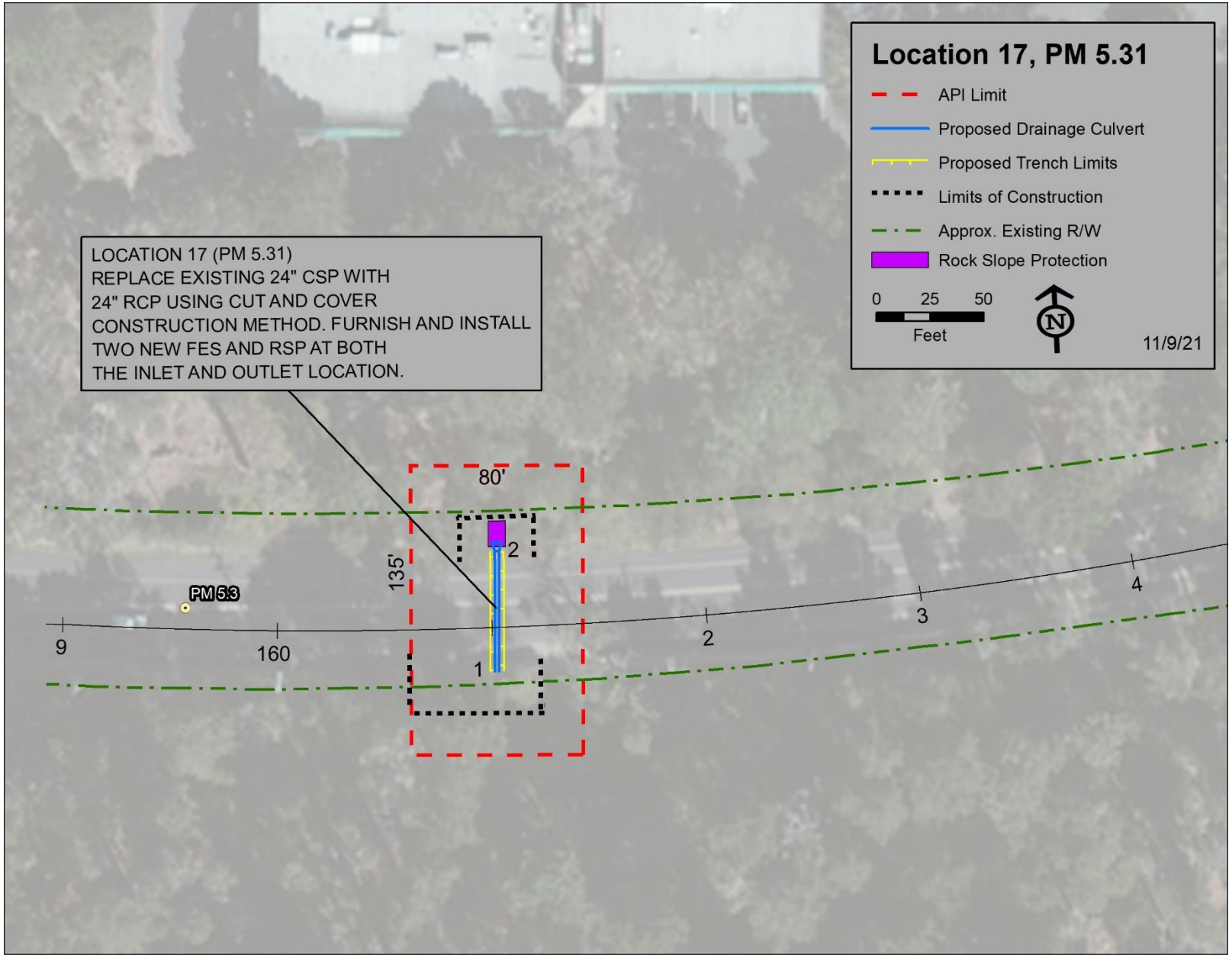

LOCATION 12 (PM 3.49)
REPLACE EXISTING 18" CSP WITH NEW 24" RCP USING CUT AND COVER CONSTRUCTION METHOD.FURNISH AND INSTALL NEW FES AND RSP AT OUTLET. MODIFY EXISTING DRAINAGE INLET TO ALLOW FOR INSTALLATION OF NEW CULVERT.
Location 12, PM 3.49
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0 10 20 40
Feet
4/26/22
9
1
R/W
1100
Existing Drainage Inlet
2
API LIMIT
115'
68
PM 3.5
1
R/W
40'
Note: Culvert failed and was repaired as an emergency project in April, 2022

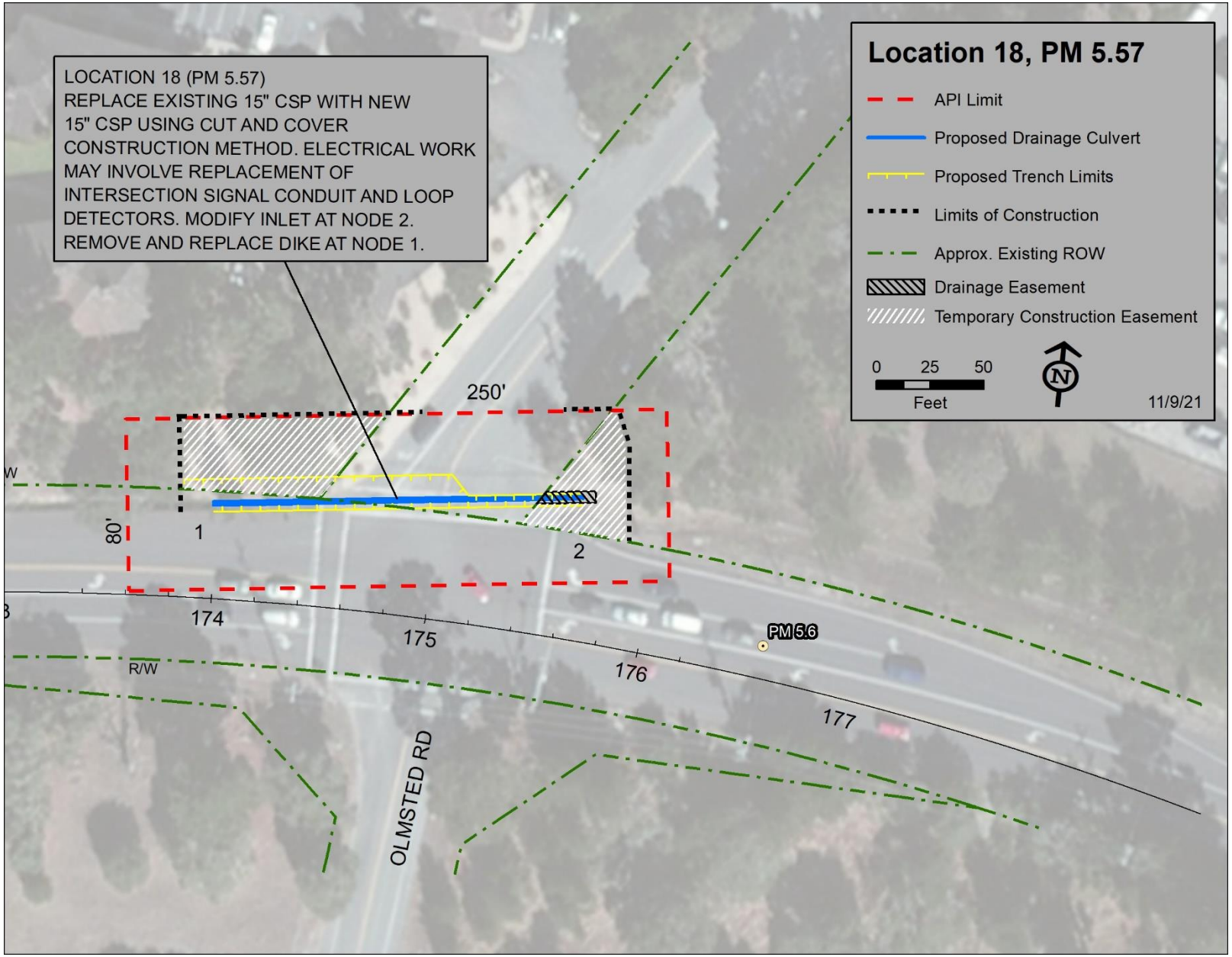

LOCATION 13 (PM 3.62)
REPLACE EXISTING 18" CSP WITH 24" RCP USING TRENCHLESS CONSTRUCTION METHOD. FURNISH AND INSTALL NEW DRAINAGE INLET AT NODE 2 AND CONSTRUCT NEW FES AND RSP AT OUTLET.
City of Monterey Encroachment Permit
40'
145'
1
2
R/W
PM 3.6
9
1110
1
Proposed Drainage Inlet
Existing Drainage System
R/W
API LIMIT
Location 13, PM 3.62
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0 10 20 40
Feet
11/09/21

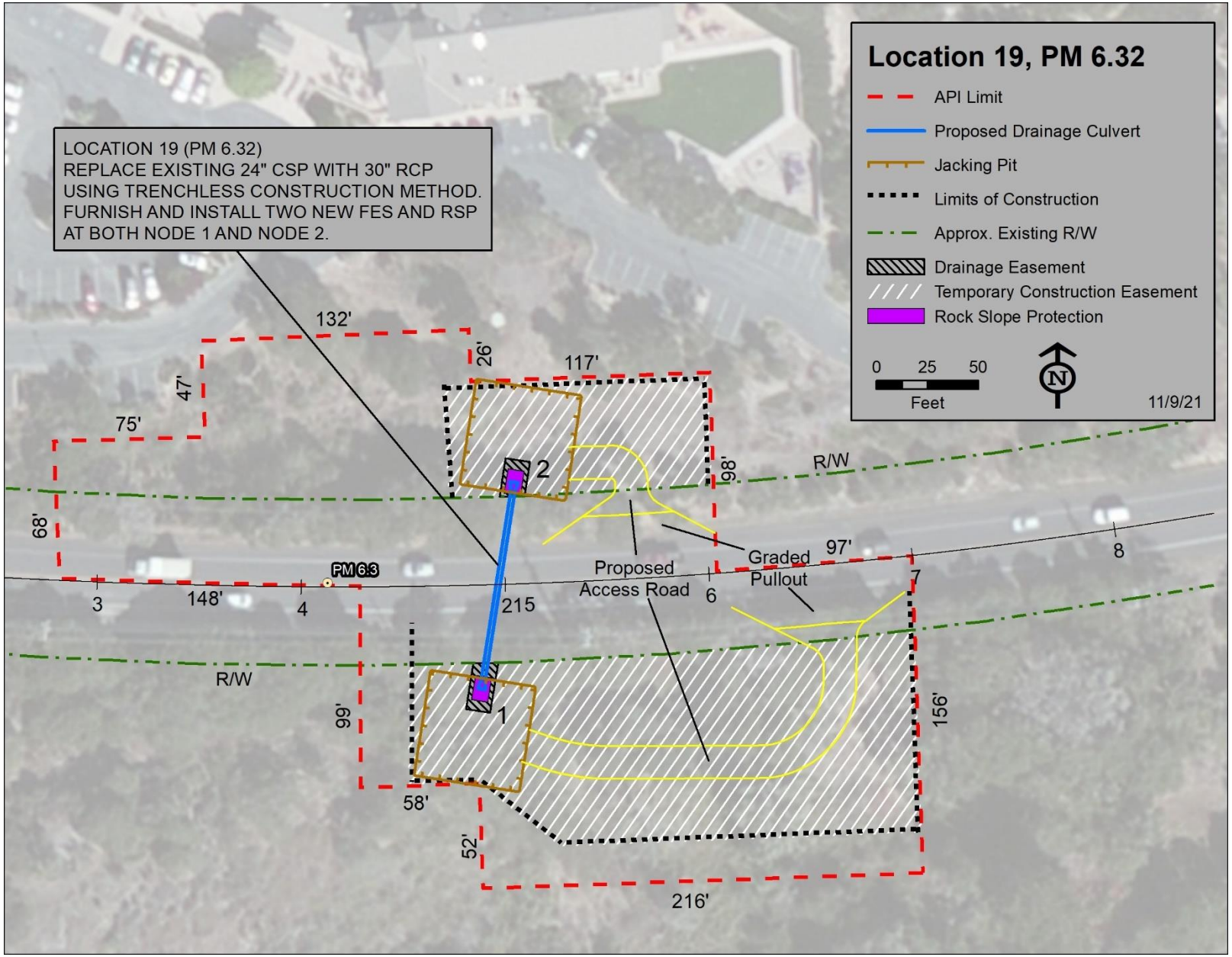

Location 14, PM R 4.14
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Electrical Conduit
Approx. Existing R/W
0 25 50 100
Feet
11/9/21
Existing lighting location 1
Proposed lighting location 2
Proposed lighting location 3
Existing lighting location 4
LOCATION 14B (PM R4.14)
REPLACE EXISTING 18" CSP WITH NEW 18" RCP USING CUT AND COVER CONSTRUCTION METHOD. MODIFY EXISTING DRAINAGE INLET TO ALLOW FOR INSTALLATION OF NEW CULVERT.
GARDEN RD
GARDEN RD
R/W
Existing TMS cabinet
PM R4.1
PM R4.2
OLD SALINAS HWY
OLD SALINAS HWY
R/W
FAIRGROUND RD
Pave MVP
Replace luminar
Sign lighting
Install new traffic census station
LOCATION 14A (PM R4.14)
REPLACE EXISTING 24" CSP WITH NEW 24" RCP USING CUT AND COVER CONSTRUCTION METHOD. FURNISH AND INSTALL DRAINAGE INLET WITHIN STATE ROW TO ESTABLISH LIMITS OF CITY OF MONTEREY DRAINAGE CULVERT.

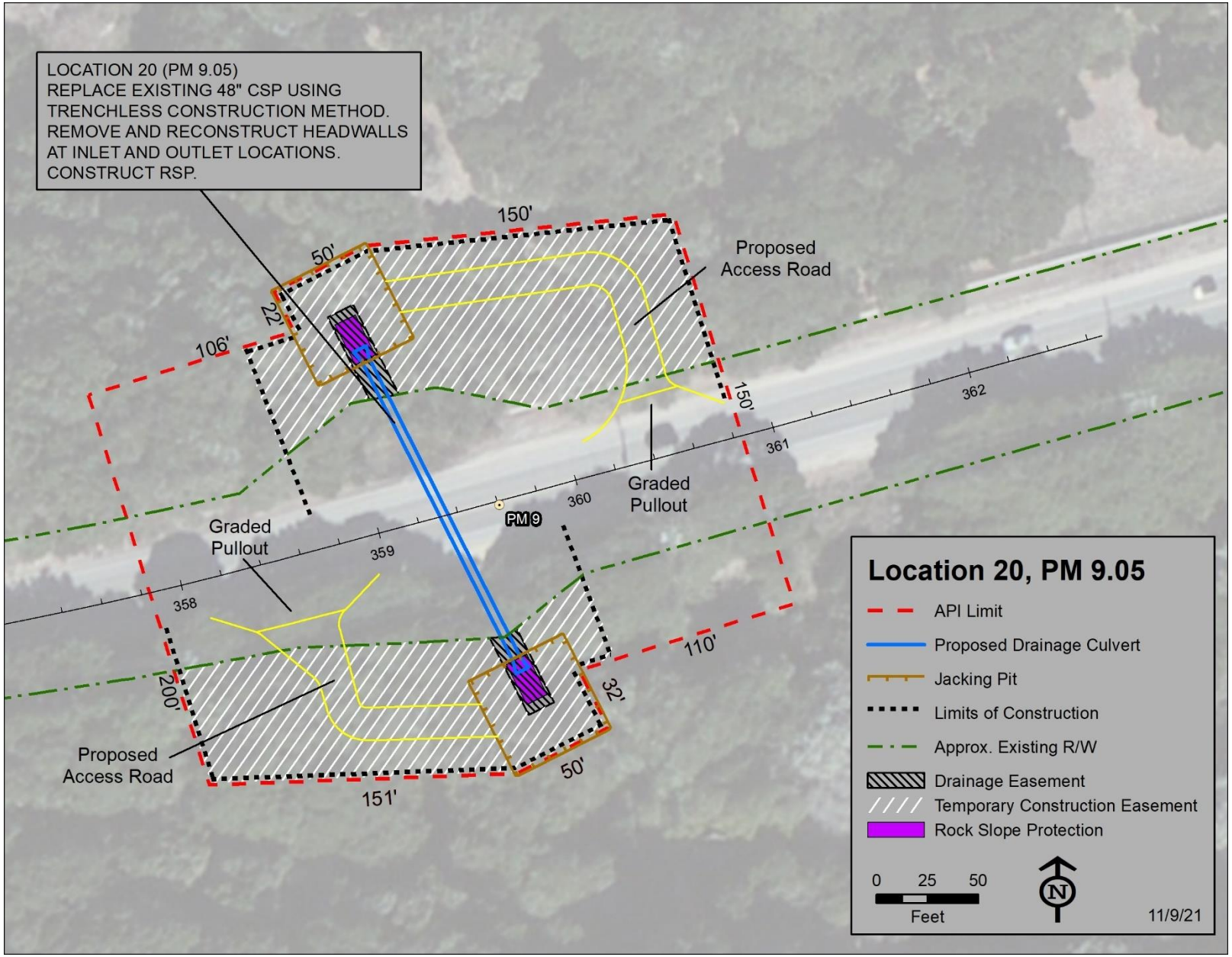

LOCATION 15 (PM 4.49)
REPLACE EXISTING 24" CSP WITH 24" RCP FROM NODE 3 TO NODE 4 USING CUT AND COVER CONSTRUCTION METHOD. MODIFY EXISTING DRAINAGE INLET AT NODE 3 AND MODIFY EXISTING MANHOLE AT NODE 4.
API LIMIT
80'
130'
4
3
2
R/W
Existing
Drainage System
122
123
124
125
PM R4.5
126
R/W
Location 15, PM 4.49
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
0 10 20 40
Feet
11/9/21

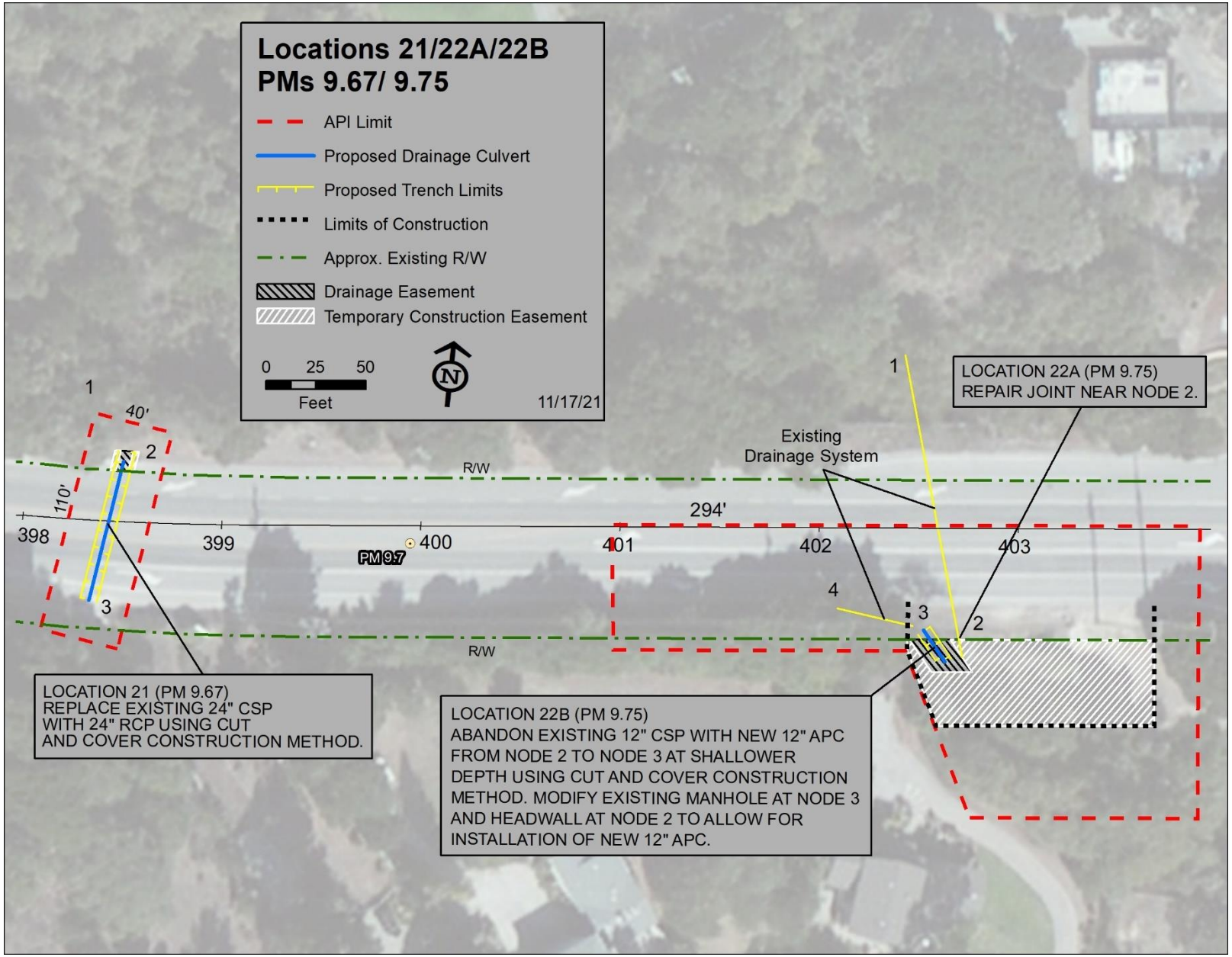

LOCATION 16 (PM 4.60)
ABANDON A PORTION OF THE TWO EXISTING 30" CONCRETE PIPES WITH TWO NEW 30" RCP AT A SHALLOWER DEPTH USING CUT AND COVER CONSTRUCTION METHOD. MODIFY EXISTING DRAINAGE INLET AT NODE 2 AND INSTALL NEW DRAINAGE INLET NEAR EXISTING HEADWALL AT OUTLET LOCATIONS.
R/W
Existing drainage system
104'
135'
2
1
9
8
130
PM R4.6
2
1
R/W
Location 16, PM 4.60
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
0 10 20 40
Feet
11/9/21

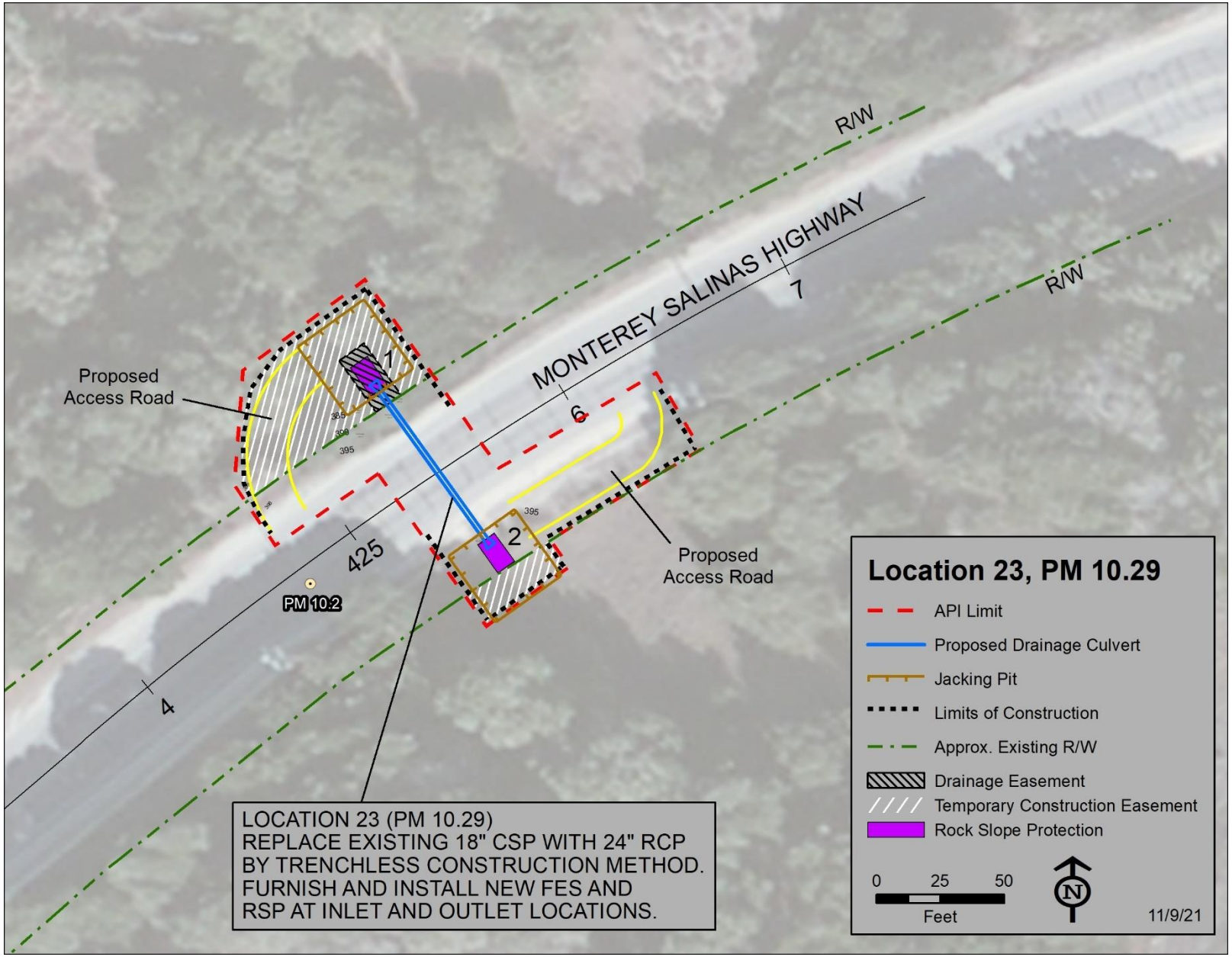

Location 17, PM 5.31
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Rock Slope Protection
0 25 50
Feet
N
11/9/21
LOCATION 17 (PM 5.31)
REPLACE EXISTING 24" CSP WITH
24" RCP USING CUT AND COVER
CONSTRUCTION METHOD. FURNISH AND INSTALL
TWO NEW FES AND RSP AT BOTH
THE INLET AND OUTLET LOCATION.
80'
135'
2
1
PM 5.3
9
160
2
3
4

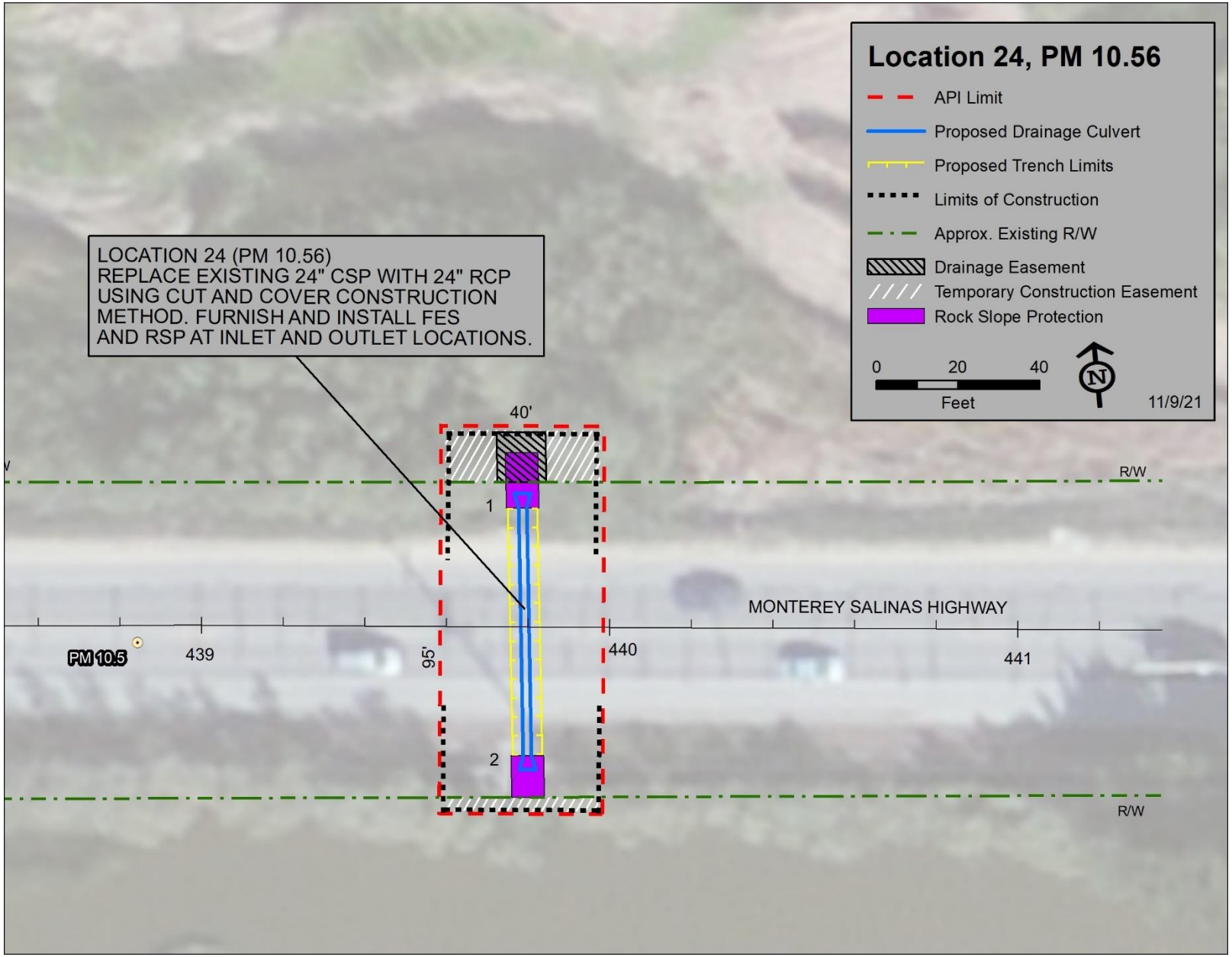

LOCATION 18 (PM 5.57)
REPLACE EXISTING 15" CSP WITH NEW 15" CSP USING CUT AND COVER CONSTRUCTION METHOD. ELECTRICAL WORK MAY INVOLVE REPLACEMENT OF INTERSECTION SIGNAL CONDUIT AND LOOP DETECTORS. MODIFY INLET AT NODE 2. REMOVE AND REPLACE DIKE AT NODE 1.
Location 18, PM 5.57
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing ROW
Drainage Easement
Temporary Construction Easement
0 25 50
Feet
N
11/9/21
250'
80'
1
2
174
175
176
177
PM 5.6
R/W
OLMSTED RD

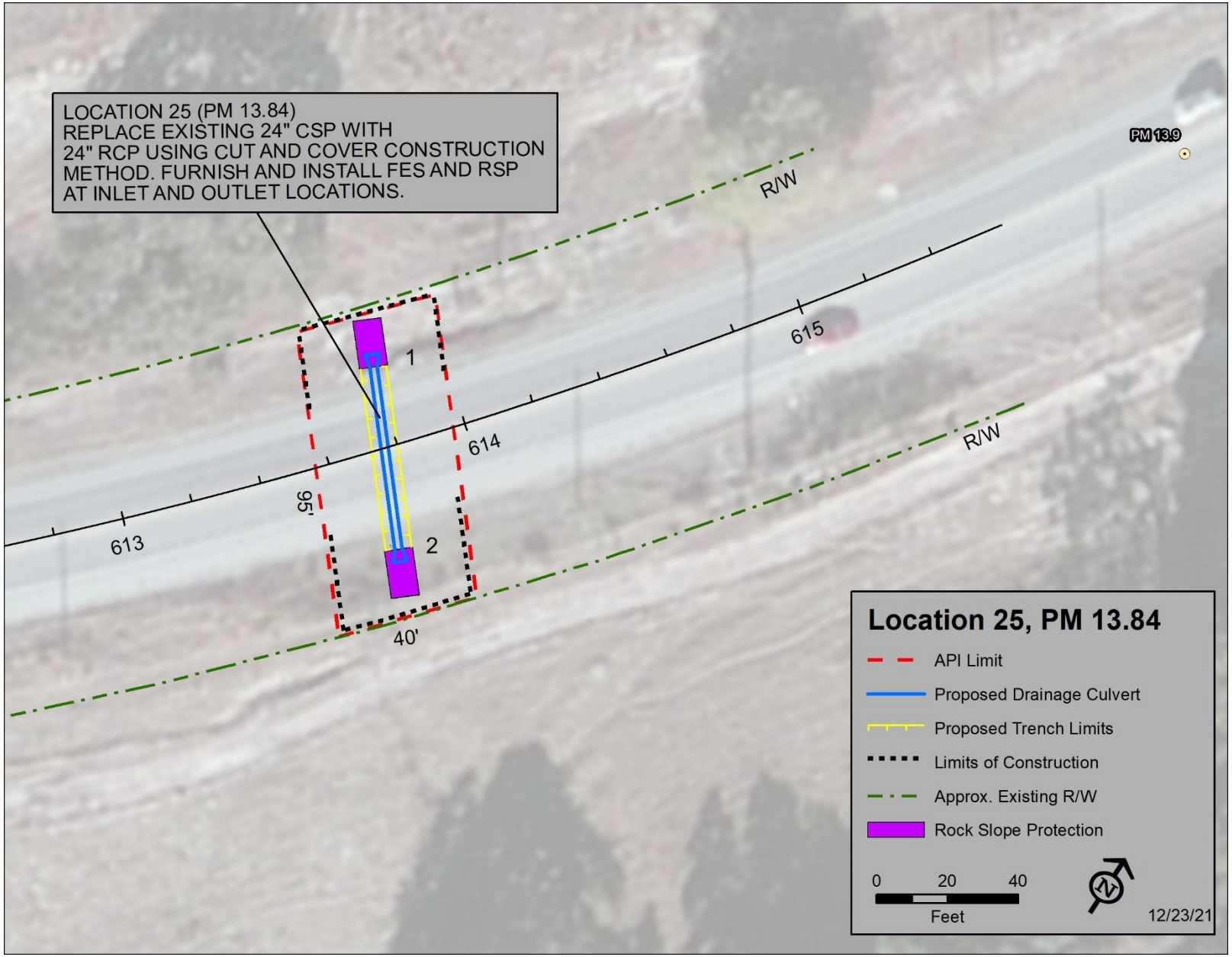

LOCATION 19 (PM 6.32)
REPLACE EXISTING 24" CSP WITH 30" RCP
USING TRENCHLESS CONSTRUCTION METHOD.
FURNISH AND INSTALL TWO NEW FES AND RSP
AT BOTH NODE 1 AND NODE 2.
Location 19, PM 6.32
API Limit
Proposed Drainage Culvert
Jacking Pit
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0 25 50
Feet
N
11/9/21
132'
26'
117'
47'
75'
98'
R/W
68'
PM 6.3
Proposed
Access Road
Graded
Pullout
97'
3
148'
4
215
6
7
8
R/W
99'
156'
58'
52'
216'
1
2

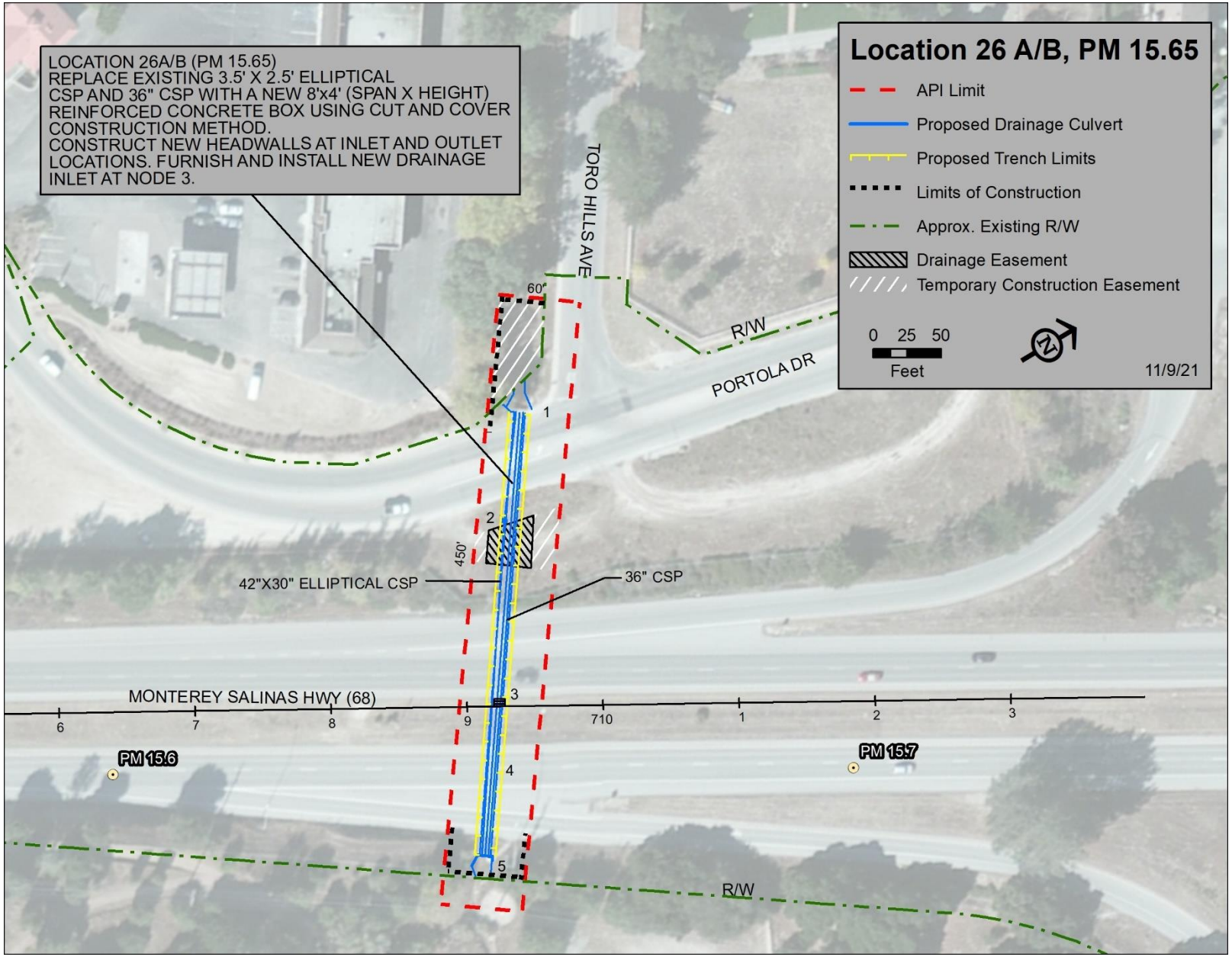

LOCATION 20 (PM 9.05)
REPLACE EXISTING 48" CSP USING TRENCHLESS CONSTRUCTION METHOD.
REMOVE AND RECONSTRUCT HEADWALLS AT INLET AND OUTLET LOCATIONS.
CONSTRUCT RSP.
150'
50'
22'
106'
Proposed Access Road
150'
362
361
360
359
358
PM 9
Graded Pullout
Graded Pullout
110'
32'
200'
50'
151'
Proposed Access Road
Location 20, PM 9.05
API Limit
Proposed Drainage Culvert
Jacking Pit
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0 25 50
Feet
N
11/9/21

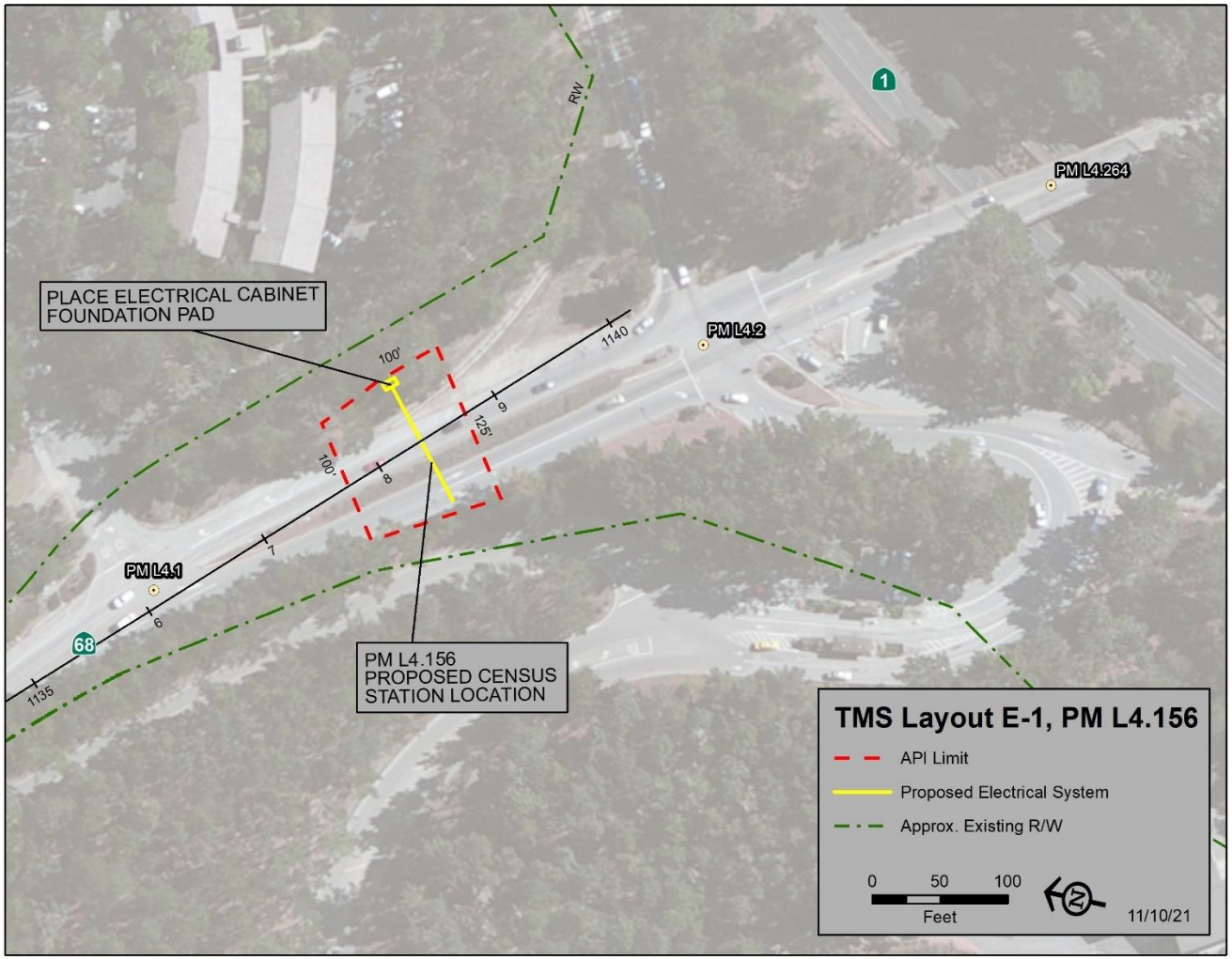

Locations 21/22A/22B
PMs 9.67/ 9.75
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
0 25 50
Feet
N
11/17/21
1
40'
2
110'
3
R/W
398
399
400
PM 9.7
401
294'
402
403
Existing
Drainage System
1
LOCATION 22A (PM 9.75)
REPAIR JOINT NEAR NODE 2.
4
3
2
R/W
LOCATION 21 (PM 9.67)
REPLACE EXISTING 24" CSP
WITH 24" RCP USING CUT
AND COVER CONSTRUCTION METHOD.
LOCATION 22B (PM 9.75)
ABANDON EXISTING 12" CSP WITH NEW 12" APC
FROM NODE 2 TO NODE 3 AT SHALLOWER
DEPTH USING CUT AND COVER CONSTRUCTION
METHOD. MODIFY EXISTING MANHOLE AT NODE 3
AND HEADWALL AT NODE 2 TO ALLOW FOR
INSTALLATION OF NEW 12" APC.


R/W
MONTEREY SALINAS HIGHWAY
7
R/W
Proposed
Access Road
1
6
2
425
PM 10.2
Proposed
Access Road
4
LOCATION 23 (PM 10.29)
REPLACE EXISTING 18" CSP WITH 24" RCP
BY TRENCHLESS CONSTRUCTION METHOD.
FURNISH AND INSTALL NEW FES AND
RSP AT INLET AND OUTLET LOCATIONS.
Location 23, PM 10.29
API Limit
Proposed Drainage Culvert
Jacking Pit
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0
25
50
Feet
N
11/9/21


Location 24, PM 10.56
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
Rock Slope Protection
0
20
40
Feet
N
11/9/21
LOCATION 24 (PM 10.56)
REPLACE EXISTING 24" CSP WITH 24" RCP
USING CUT AND COVER CONSTRUCTION
METHOD. FURNISH AND INSTALL FES
AND RSP AT INLET AND OUTLET LOCATIONS.
40'
95'
1
2
R/W
R/W
MONTEREY SALINAS HIGHWAY
PM 10.5
439
440
441


LOCATION 25 (PM 13.84)
REPLACE EXISTING 24" CSP WITH
24" RCP USING CUT AND COVER CONSTRUCTION
METHOD. FURNISH AND INSTALL FES AND RSP
AT INLET AND OUTLET LOCATIONS.
PM 13.9
R/W
615
614
613
1
2
95'
40'
R/W
Location 25, PM 13.84
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Rock Slope Protection
0
20
40
Feet
12/23/21


LOCATION 26A/B (PM 15.65)
REPLACE EXISTING 3.5' X 2.5' ELLIPTICAL CSP AND 36" CSP WITH A NEW 8'x4' (SPAN X HEIGHT) REINFORCED CONCRETE BOX USING CUT AND COVER CONSTRUCTION METHOD.
CONSTRUCT NEW HEADWALLS AT INLET AND OUTLET LOCATIONS. FURNISH AND INSTALL NEW DRAINAGE INLET AT NODE 3.
Location 26 A/B, PM 15.65
API Limit
Proposed Drainage Culvert
Proposed Trench Limits
Limits of Construction
Approx. Existing R/W
Drainage Easement
Temporary Construction Easement
0 25 50
Feet
11/9/21
TORO HILLS AVE
PORTOLA DR
R/W
60'
450'
42"X30" ELLIPTICAL CSP
36" CSP
MONTEREY SALINAS HWY (68)
PM 15.6
PM 15.7
1
2
3
4
5


PLACE ELECTRICAL CABINET FOUNDATION PAD
PM L4.156 PROPOSED CENSUS STATION LOCATION
PM L4.1
PM L4.2
PM L4.264
RW
1
68
1135
1140
100'
125'
6
7
8
9
TMS Layout E-1, PM L4.156
API Limit
Proposed Electrical System
Approx. Existing R/W
0 50 100
Feet
11/10/21

Appendix C Proposed Culvert Improvements

The table below features a project description and summary of existing culvert conditions and proposed work. [Table C-1 and Table C-2 have been updated since the draft environmental document was circulated.]

Table C-1 Culvert Repair/Replacement Descriptions

Culvert Location Number	Outlet Post Mile	Culvert System Number	Inlet Number/Node	Outlet Number/Node	Existing Condition	Proposed Improvement
1	0.25	440684000025001	3	2	A corrugated steel pipe that is 24 inches in diameter, 95 feet long, with 1 foot of cover.	Replace an existing 24-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Construct asphalt concrete dike and asphalt concrete spillway along westbound State Route 68. Regrade channel area at node 3.
2	1.25	440688000125001	3	2	High-Density Polyethylene that is 24 inches in diameter, 115 feet long, with 5.5 feet of cover.	Replace an existing 24-inch High-Density Polyethylene with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Modify existing drainage inlets at nodes 2 and 3.
3	1.79	440684000179001	2	1	A corrugated steel pipe that is 18 inches in diameter, 75 feet long, with 6 feet of cover.	Replace an existing 18-inch corrugated steel pipe with a 24-inch reinforced concrete pipe using the cut-and-cover construction method. Also, furnish and install a new drainage inlet at node 2.

Culvert Location Number	Outlet Post Mile	Culvert System Number	Inlet Number/Node	Outlet Number/Node	Existing Condition	Proposed Improvement
4	2.06	440684000206001	2	1	A concrete pipe that is 18 inches in diameter, 130 feet long, with 3 feet of cover.	Replace 10 feet of an existing 18-inch diameter reinforced concrete pipe with an 18-inch diameter reinforced concrete pipe at node 1. Guard railing reconstruction will be required for access to the culvert outlet. Furnish and install a flared end section and rock slope protection at the outlet.
5	2.19	Not Applicable	Not Applicable	Not Applicable	Not Applicable	The culvert was removed from the project because it was determined to be privately owned.
6	2.2	440684000220001	2	1	A corrugated steel pipe that is 24 inches in diameter, 80 feet long, with 11 feet of cover.	Replace an existing 24-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the cut-and-cover construction method. Also, furnish and install a flared end section and rock slope protection at the inlet and outlet.
7	2.27	440684000227001	3	2	A corrugated steel pipe that is 24 inches in diameter, 10 feet long, with 1 foot of cover.	Replace a culvert headwall and an existing 24-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe. Modify the manhole at node 3.

Culvert Location Number	Outlet Post Mile	Culvert System Number	Inlet Number/Node	Outlet Number/Node	Existing Condition	Proposed Improvement
8	2.73	440684000273001	2	1	A corrugated steel pipe that is 24 inches in diameter, 110 feet long, with 18 feet of cover.	Replace an existing 24-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the trenchless construction method. Also, furnish and install two flared end sections and rock slope protection at inlet and outlet locations.
9	2.80	440684000280001	2	1	A corrugated steel pipe that is 24 inches in diameter, 110 feet long, with 21 feet of cover.	Replace an existing 24-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the trenchless construction method. Also, furnish and install two new flared end sections and rock slope protection at inlet and outlet locations.
10	3.01	440684000301001	2	1	A composite pipe that is 18 inches in diameter, 100 feet long, with 17 feet of cover.	Abandon an existing 18-inch diameter composite culvert. Construct a 24-inch diameter reinforced concrete pipe at a shallower depth by using the cut-and-cover construction method. Also, furnish and install a new drainage inlet and construct a flared end section and rock slope protection at the outlet location.

Culvert Location Number	Outlet Post Mile	Culvert System Number	Inlet Number/Node	Outlet Number/Node	Existing Condition	Proposed Improvement
11	3.17	440680000317001	2	1	A 1.9-by-1.4-by-55-foot elliptical corrugated steel pipe with 6 feet of cover.	Replace an existing elliptical corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the cut-and-cover construction method. Also, furnish and install a new drainage inlet and install a new flared end section and rock slope protection at the outlet location.
12 Removed from project scope: this culvert failed and was repaired as an emergency project in April 2022.	3.49	440680000349001	2	1	A corrugated steel pipe that is 18 inches in diameter, 60 feet long, with 4 feet of cover.	Replace an existing 18-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the cut-and-cover construction method. Furnish and install a new drainage inlet at node 2 and construct a new flared end section and rock slope protection at the outlet. Modify an existing drainage inlet at node 2.
13	3.62	440680000362001	2	1	A corrugated steel pipe that is 18 inches in diameter, 65 feet long, with 10 feet of cover.	Replace an existing 18-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the trenchless construction method. Also, furnish and install a new drainage inlet at node 2 and construct a flared end section and rock slope protection at the outlet location.

Culvert Location Number	Outlet Post Mile	Culvert System Number	Inlet Number/Node	Outlet Number/Node	Existing Condition	Proposed Improvement
14A	4.14	440688100414001	2	1	A corrugated steel pipe that is 24 inches in diameter, 145 feet long, with 4 feet of cover.	Replace an existing 24-inch diameter corrugated steel pipe with a new 24-inch diameter reinforced concrete pipe using the cut-and-cover construction method. Furnish and install a drainage inlet within the state right-of-way to establish limits of the City of Monterey's drainage culvert.
14B	4.14	440688100414001	7	6	A concrete pipe that is 18 inches in diameter, 55 feet long, with 3.5 feet of cover.	Replace an existing 18-inch diameter concrete pipe with a new 18-inch diameter reinforced concrete pipe using the cut-and-cover construction method.
15	4.49	440684100449001	4	3	A corrugated steel pipe that is 24 inches in diameter, 55 feet long, with 3 feet of cover.	Replace an existing 24-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe from node 3 to node 4 using the cut-and-cover construction method. Modify the manhole at node 4 and modify the drainage inlet at node 3.

Culvert Location Number	Outlet Post Mile	Culvert System Number	Inlet Number/Node	Outlet Number/Node	Existing Condition	Proposed Improvement
16	4.6	440684100460001	2	1	Two concrete pipes that are 30 inches in diameter, 90 feet long, with 8 feet of cover.	Abandon a portion of the two existing 30-inch diameter concrete pipes and install two new 30-inch diameter reinforced concrete pipes at a shallower depth using the cut-and-cover construction method. Modify the drainage inlet at node 2 and install a new drainage inlet near the existing headwall at the outlet location.
17	5.31	440684000531001	2	1	A corrugated steel pipe that is 24 inches in diameter, 55 feet long, with 3.5 feet of cover.	Replace an existing 24-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the cut-and-cover construction method. Furnish and install two new flared end sections and rock slope protection at both inlet and outlet locations.
18	5.57	440680000557001	2	1	A corrugated steel pipe that is 15 inches in diameter, 175 feet long, with 7 feet of cover.	Replace an existing 15-inch diameter corrugated steel pipe with a new 15-inch diameter corrugated steel pipe using the cut-and-cover construction method. Electrical work may involve the replacement of intersection signal conduit and loop detectors. Modify the drainage inlet at node 1. Remove and replace the dike at node 1.

Culvert Location Number	Outlet Post Mile	Culvert System Number	Inlet Number/Node	Outlet Number/Node	Existing Condition	Proposed Improvement
19	6.32	440684000632001	2	1	A corrugated steel pipe that is 24 inches in diameter, 70 feet long, with 13 feet of cover.	Replace an existing 24-inch diameter corrugated steel pipe with a 30-inch diameter reinforced concrete pipe using the trenchless construction method. Furnish and install two new flared end sections and rock slope protection at nodes 1 and 2.
20	9.05	440680000905001	2	1	A corrugated steel pipe that is 48 inches in diameter, 170 feet long, with 36 feet of cover.	Replace an existing 48-inch diameter corrugated steel pipe with a 48-inch diameter reinforced concrete pipe using the trenchless construction method. Remove and reconstruct headwalls at inlet and outlet locations. Construct rock slope protection.
21	9.67	440680000980001	3	2	A corrugated steel pipe that is 24 inches in diameter, 70 feet long, with 5 feet of cover.	Replace an existing 24-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the cut-and-cover construction method.
22A	9.75	440680000978001	2	1	A concrete pipe that is 54 inches in diameter, 120 feet long, with 14 feet of cover.	Repair the joint near node 2.

Culvert Location Number	Outlet Post Mile	Culvert System Number	Inlet Number/Node	Outlet Number/Node	Existing Condition	Proposed Improvement
22B	9.75	440680000978001	3	2	A corrugated steel pipe that is 12 inches in diameter, 25 feet long, with 10 feet of cover.	Abandon an existing 12-inch diameter corrugated steel pipe and replace it with a new 12-inch diameter alternative pipe culvert from node 2 to node 3 at a shallower depth using the cut-and-cover construction method. Modify the drainage inlet at node 3 and modify the headwall at node 2.
23	10.29	440680001029001	2	1	A corrugated steel pipe that is 18 inches in diameter, 80 feet long, with 13 feet of cover.	Replace an existing 18-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the trenchless construction method. Furnish and install a new flared end section and rock slope protection at inlet and outlet locations.
24	10.56	440680001056001	2	1	A corrugated steel pipe that is 24 inches in diameter, 65 feet long, with 3 feet of cover.	Replace an existing 24-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the cut-and-cover construction method. Furnish and install a flared end section and rock slope protection at inlet and outlet locations.

Culvert Location Number	Outlet Post Mile	Culvert System Number	Inlet Number/Node	Outlet Number/Node	Existing Condition	Proposed Improvement
25	13.84	440680001384001	2	1	A corrugated steel pipe that is 24 inches in diameter, 55 feet long, with 2 feet of cover.	Replace an existing 24-inch diameter corrugated steel pipe with a 24-inch diameter reinforced concrete pipe using the cut-and-cover construction method. Furnish and install a flared end section and rock slope protection at inlet and outlet locations.
26A	15.65	440686001565001	3	1	A 3.5-by-2.5-by-330-foot elliptical corrugated steel pipe with 6 feet of cover.	Replace an existing 3.5-by-2.5 foot elliptical corrugated steel pipe (Location 26A) and a 36-inch diameter corrugated steel pipe (Location 26B) with one new 8-by-4-foot (span by height) Reinforced Concrete Box using the cut-and-cover construction method.
26B	15.65	440686001565001	4	3	A corrugated steel pipe that is 36 inches in diameter, 330 feet long, with 6 feet of cover.	Refer to proposed improvements above for Location 26A. Also, construct new headwalls at inlet and outlet locations. Furnish and install a new drainage inlet at node 3.

Table C-2 Temporary Construction and Permanent Drainage Easements

Culvert Location Number	Drainage System Location (Post Mile)	Owner 1	Owner 2	Assessor's Parcel Number	Permanent Drainage Easement (Square Feet) **Total 8,289.85**	Temporary Construction Easement (Square Feet) **Total 138,895.80**	Notes
3	Post Mile 1.79	Glen Heights Homeowners' Association, Inc.	Not Applicable	007-613-041-000	91.73	316.12	Not Applicable
4	Post Mile 2.06	Enrique Ramirez 2	Enrique Ramirez	008-041-005-000	1,174.95	875.12	Not Applicable
6	Post Mile 2.20	Pebble Beach Company	Not Applicable	008-041-009-000	191.9	446.23	Not Applicable
8	Post Mile 2.73	Pebble Beach Company	Not Applicable	008-041-009-000	606.43	13,074.64	Not Applicable
8	Post Mile 2.73	Pebble Beach Company	Not Applicable	008-131-007-000	343.2	3816.4	Not Applicable
9	Post Mile 2.80	Pebble Beach Company	Not Applicable	008-041-009-000	764.58	35,365.03	Not Applicable
9	Post Mile 2.80	Pebble Beach Company	Not Applicable	008-131-007-000	176.13	1,631.87	Not Applicable
10	Post Mile 3.01	Pebble Beach Company	Not Applicable	008-041-009-000	583.63	10,587.73	Not Applicable
11	Post Mile 3.17	Pebble Beach Company	Not Applicable	008-132-014-000	130.9	602.06	Not Applicable
12 This culvert failed and was repaired in April 2022	Post Mile 3.49 Removed from project scope	Pebble Beach Company	Not Applicable	008-132-015-000	258.89	659.67	Not Applicable
13	Post Mile 3.62	Pebble Beach Company	Not Applicable	008-132-015-000	215.6	1,198.12	An encroachment permit will be requested from the City of Monterey for work within the city.

Culvert Location Number	Drainage System Location (Post Mile)	Owner 1	Owner 2	Assessor's Parcel Number	Permanent Drainage Easement (Square Feet) **Total 8,289.85**	Temporary Construction Easement (Square Feet) **Total 138,895.80**	Notes
14A	Post Mile 4.14 A	Public Land	Not Applicable	City Road	0	0	An encroachment permit will be requested from the City of Monterey for work within the city.
18	Post Mile 5.57	Monterey By the Sea Hospitality, Inc.	Not Applicable	013-322-007-000	10.05	2,767.6	Not Applicable
18	Post Mile 5.57	Monterey Peninsula Airport District	Not Applicable	013-221-020-000	140.22	1,468.56	Olmsted Road is a street in the City of Monterey. Unclear whether the City of Monterey or property owner to allow TCE/Drainage Rights.
19	Post Mile 6.32	Calvary Chapel Monterey Bay	Not Applicable	259-021-012-000	216.74	6,966.4	Not Applicable
19	Post Mile 6.32	Paul W Hiss	The Paul W Hiss 2001 Trust	259-091-010-000	286.3	21,280.42	Not Applicable
20	Post Mile 9.05	New Cities Land Company, Inc.	Not Applicable	173-071-056-000	662.52	15,745.85	Not Applicable
20	Post Mile 9.05	Ng Lit Tr	Not Applicable	416-197-003-000	566.46	12,552.24	Not Applicable
21	Post Mile 9.67	New Cities Land Company, Inc.	Not Applicable	173-071-056-000	61.12	61.12	Not Applicable
22B	Post Mile 9.75	Thomas B Bramers	Janice Bramers	173-062-005-000	333.95	4,753.00	Not Applicable
23	Post Mile 10.29	Pasadera Golf and Country Club LLC	Not Applicable	173-061-003-000	300.34	2,758.17	Not Applicable

Culvert Location Number	Drainage System Location (Post Mile)	Owner 1	Owner 2	Assessor's Parcel Number	Permanent Drainage Easement (Square Feet) **Total 8,289.85**	Temporary Construction Easement (Square Feet) **Total 138,895.80**	Notes
23	Post Mile 10.29	Pasadera Golf and Country Club LLC	Not Applicable	173-072-041-000	0	19.523	Not Applicable
23	Post Mile 10.29	William Khieu	Juliette Khieu Le	173-062-009-000	0	486.73	Not Applicable
24	Post Mile 10.56	County of Monterey	Not Applicable	173-011-025-000	147.48	338.97	Not Applicable
24	Post Mile 10.56	Stolich Whitney L Tr	Not Applicable	173-011-011-000	0	127.45	Not Applicable
26	Post Mile 15.65	County of Monterey	Not Applicable	161-302-028-000	0	0	An encroachment permit will be requested for the area identified, as shown on the layout sheet.
26	Post Mile 15.65	Arman Kooroshfar	Maria Kooroshfar	161-041-040-000	1,026.26	997.11	Not Applicable

Appendix D Coastal Policy Analysis

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

California has developed the Coastal Zone Management Plan for the state and has enacted the California Coastal Act of 1976 to protect the state coastline. The policies established by the California Coastal Act are similar to those for the Coastal Zone Management Act: they include the protection and expansion of public access and recreation; the protection, enhancement, and restoration of Environmentally Sensitive Areas; the protection of agricultural lands; the protection of scenic beauty; and the protection of property and life from coastal hazards. The California Coastal Commission is responsible for implementation and oversight under the California Coastal Act.

Just as the federal Coastal Zone Management Act delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments to enact their own local coastal programs. The proposed project is subject to the County of Monterey Local Coastal Program. 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. A Federal Consistency Certification will be needed as well. The Federal Consistency Certification process will be initiated before the final environmental document and will be completed to the maximum extent possible during the National Environmental Policy Act (NEPA) process.

Each local coastal program in the state is required to include both a land-use plan and a coastal implementation plan that, combined, prescribe statewide Coastal Act coastal resources policies that are applicable to the local context, resources, and conditions (Del Monte Forest Land Use Plan, 2012). The County of Monterey divided its coastal area into four segments for which specific land-use plans were prepared. The California Coastal Commission originally certified the county's four Land Use Plans between 1982 and 1986. The county's Coastal Implementation Plan was certified in 1988, after which the County of Monterey assumed authority for issuing most coastal development permits for the individual land use plan areas.

Most of the western portion of the proposed State Route 68 Drainage Improvement project on the Monterey Peninsula falls within the coastal zone and the jurisdiction of the Monterey County Local Coastal Program and associated regulations. The project is subject to the requirements of the Del Monte Forest Area Land Use Plan (adopted by Monterey County on May 22, 2012, and Local Coastal Plan Amendment effective

June 22, 2012), and the Monterey County Coastal Implementation Plan Part 5, Regulations for Development in the Del Monte Forest Land Use Plan Area, Chapter 20.147, (Certified by the California Coastal Commission May 9, 2012). The Coastal Implementation Plan Part 5 establishes regulations, standards, and procedures to implement the policies of the Del Monte Forest Land Use Plan for properties in the coastal zone and the Del Monte Forest planning area.

Coastal Policy Analysis

The following section includes a listing of relevant policies from Chapter 3 of the California Coastal Act (Resource Planning and Management Policies) and the County of Monterey's Local Coastal Program Del Monte Forest Land Use Plan, Chapter 2, Resource Management Element, the Coastal Implementation Plan, Part 5, Regulations for Development in the Del Monte Forest Land Use Plan Area (Chapter 20.147), and Title 20, Zoning Ordinance for County of Monterey (applies to areas in the coastal zone).

The relevant key policies from each plan and ordinance have been grouped together by subject. For each key policy, a determination was made for whether the proposed project is consistent with coastal zone policies, and a discussion is provided. Policies for resources that will not be affected by the project are not included.

Public Access

Relevant Policies

California Coastal Act, Chapter 3:

- 30211—Development not to Interfere with Access

Del Monte Forest Land Use Plan, Chapter 3 Land Use and Development Element:

Key Policy: Public Access—*Land use designations are directive as to the type of use, but use will only be allowed provided such use and related development can be accomplished, consistent with Land Use Plan policies, including resource protection requirements. Development will be sited and designed in such a manner as to protect and enhance coastal resources, including public recreational access.*

Del Monte Forest Land Use Plan, Chapter 5: Public Access Element:

Key Policy: *Public Access, Coastal and Scenic, and Visual Resources: Visual and physical public access to and along the shoreline and the enjoyment of public recreational values throughout the Del Monte Forest, consistent with the basic purpose of the California Coastal Act, will be maximized.*

Policies 121, 123, 124, 125, 126, 132, 133, 136, 137, 128, 140 and 141 are further refinements of the key policy above.

Consistency Analysis

Traffic delays on State Route 68 may occur during project construction due to temporary lane closures in the areas around the culvert repair locations. The construction work will not occur at all project culverts simultaneously, and therefore, portions of the project limits will undergo travel lane restrictions or detours at any one time. The Transportation Management Plan that will be implemented during the construction period will ensure that coastal access via State Route 68 or temporary detour routes, if and where necessary, will be maintained at all times throughout the construction period. Once construction of the culvert repairs is complete, traffic delays caused by project construction will cease; therefore, there will be no long-term operational impacts to coastal access from the project.

No coastal policy inconsistencies are expected.

Visual and Scenic Resources

Relevant Policies

California Coastal Act, Chapter 3:

- 30251—Scenic and Visual Qualities

Del Monte Forest Land Use Plan, Chapter 2 Resource Management Element:

Key Policy: *The Del Monte Forest and 17-Mile Drive are significant and important visitor destinations. It is the objective of this Land Use Plan to protect the area's magnificent scenic and visual resources, to avoid incompatible development, and to encourage improvements and facilities that complement the Forest's natural scenic assets and enhance the public's enjoyment of them. To protect the scenic and visual resources of the Del Monte Forest area, only development that does not block significant public views and does not significantly adversely impact public views and scenic character, including with specific attention to the 17-Mile Drive corridor and designated public access areas/vista points, will be allowed.*

- Policy 47—Protection of views from designated public access areas and vista points from State Route 68 and 17-Mile Drive corridors.
- Policy 48—Development within visually prominent settings.
- Policy 49—Open space conservation and scenic easements for visually prominent areas are required during the development review process.
- Policy 50—Utility lines undergrounded.
- Policy 52—Adequate structural setbacks for development within the viewshed of visually prominent settings.
- Policy 53—Siting of structures within public views of scenic areas.

- Policy 54—Structures in public view in scenic areas to use non-invasive vegetation, topography, and/or screening to provide visual compatibility.

Consistency Analysis

As described in more detail in the Aesthetics section (Section 2.1.1), the replacement drainage culverts and other affiliated infrastructure will mostly be below ground within or adjacent to the highway and will not block views of the surrounding scenic vistas. The project area has overhead utilities, signage, lighting, and other roadside elements. Staining any visible drainage structures that the project will construct will minimize any effects on the topographic and vegetative elements of the area's scenic vistas, which will remain visible. Therefore, the proposed project will not block significant views or otherwise have a substantial adverse effect on the scenic vistas in the project area.

The proposed trenchless and cut-and-cover construction methods for replacing and repairing aging and defective pipes and other infrastructure will necessitate the removal of individual trees and other vegetation at selected culvert locations. Most of the locations where trees will be removed are densely vegetated and will involve the removal of one to several individual trees; most of native oak and pine trees that will be removed for project construction access and work will be at two locations (post miles 6.32 and 9.05), which are outside of the coastal zone. With the removal of only the minimum amount of vegetation required and protection of vegetation adjacent to the work areas, as well as revegetation of the project work areas after construction, including replanting removed native Monterey pines and oak trees and in accordance with specifications in Mitigation Measures BIO–14 and BIO–17, the project will not substantially damage scenic resources in the project area as viewed from the project route as an Eligible Scenic Highway in the coastal zone portion.

Archaeological and Paleontological Resources

Relevant Policies

California Coastal Act, Chapter 3:

- 30244—Archaeological or Paleontological Resources

Del Monte Forest Land Use Plan, Chapter 2 Resource Management Element:

- Policy 57—Identification of archaeological, historical, and paleontological resources and coordination with applicable Native American representatives.
- Policy 58—Archaeological Survey.
- Policy 59—Avoidance of development on significant archaeological sites.
- Policy 60—Development design, avoidance, and mitigation on parcels where cultural resource sites are located.
- Policy 61—Preservation and mitigation measures for construction on cultural resources sites.

- Policy 62—Prohibition of unauthorized collection of archaeological, historical, and paleontological artifacts.
- Policy 63—Limitation of public access to or over known archaeological or paleontological sites.

Consistency Analysis

No archaeological or historic era resources are expected to be impacted by the proposed project. No human remains are expected to be disturbed. The proposed culvert and Transportation Management System improvements are not expected to affect paleontological resources. While archaeological and paleontological resources are not expected to be encountered, standard specifications that cover appropriate handling of these resources if they were to be inadvertently discovered have been included in the project. Therefore, the project will be consistent with coastal policies related to archaeological, historical, and paleontological resources.

Hazards and Hazardous Waste

Relevant Policies

California Coastal Act, Chapter 3:

- 30232—Oil and Hazardous Substance Spills

Del Monte Forest Land Use Plan, Chapter 2 Resource Management Element:

Key Policy: *Coastal Hazards and Shoreline Development: Land uses and development in areas of geologic, flood, fire, and other coastal hazards will be carefully regulated through the best available planning practices and sited and designed to minimize risks to life and property and damage to the natural environment.*

Consistency Analysis

Known leaking underground storage tank cases near the project are now closed. Preliminary Site Investigations indicate that soil contaminated with Aerially Deposited Lead is present near project culvert locations in the coastal zone. Additional soil testing may be required during the project design (Plans, Specifications, and Estimates) phase to document lead concentrations at unsampled locations of project work areas. Applicable Standard Special Provisions will be included on the construction contract, and a Lead Compliance Plan will be prepared and implemented by the construction contractor, in accordance with the 2016 Aerially Deposited Lead Agreement.

Implementation of Caltrans Best Management Practices, Standard Specifications, Standard Special Provisions, and measures included in the Water Pollution Control Program will limit the potential for hazardous waste spills to occur and provide instructions for the appropriate containment, cleanup, and handling of hazardous

substances due to accidental spills. The project will therefore be consistent with California Coastal Act policy 30232.

The proposed culvert replacement/repairs will not generate additional surface runoff that will increase flood flows in flood zones or cause additional flood hazards that will impact the ability of existing downstream stormwater facilities to convey surface drainage systems' capacities.

The project culvert repair locations in the coastal zone are in high fire severity zones with woodland and other highly flammable vegetation on either side of the highway. Construction activities, including vegetation removal at some of the culvert repair locations, will have the potential to unintentionally cause brushfire from the use of fuel-powered and electrical construction equipment and vehicles. The project will implement Caltrans Standard Specifications for fire prevention and safety as required precautionary measures to prevent fire-related incidents during construction in accordance with the California Division of Safety and Health-Fire Protection and Prevention Guidance. Vegetation removal will be planned and conducted using techniques to avoid and minimize unintentional fire hazards.

County of Monterey geologic and soil mapping information identifies portions of the project limits as areas of potential liquefaction and landslide hazards. Construction will include slope compaction specifications so as not to cause potential instability of the soils on- or offsite. In addition, the culvert repairs will not increase the groundwater levels in the work areas and will, therefore, not increase the liquefiable potential of the soils in the project construction areas.

No coastal policy inconsistencies are expected.

Air Quality and Greenhouse Gas

Relevant Policies

California Coastal Act, Chapter 3:

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

Consistency Analysis

The project will not add additional lanes or capacity to the highway; therefore, no long-term changes in emissions will result. By incorporating appropriate engineering design and following the Best Management Practices and standard specifications (see Section 1.7) during construction, minimal short-term air quality impacts will be expected. Implementation of the Greenhouse Gas Reduction Strategies listed in Section 2.1.8 will help to offset greenhouse gas emissions during project construction.

No coastal policy inconsistencies are expected.

Freshwater and Marine Resources

Relevant Policies

[The following sentence has been updated since the draft environmental document was circulated.] *Del Monte Forest Land Use Plan, Chapter 2 Resource Management Element, and Coastal Implementation Plan, Part 5:*

Key Policy: *The water quality and biological value of the Del Monte Forest's coastal stream, wetlands, open coastal waters, and the Carmel Bay will be protected and maintained, including through the application of adequate buffers and setbacks, maintaining hydrologic inputs, protecting riparian and wetland vegetation, carefully controlling grading to minimize erosion and sedimentation, and effective collection, filtration, and treatment of runoff.*

- Policy 1—New development will be sited to minimize runoff, site disturbance, erosion, and sedimentation.
- Policy 2—Non-point sources of pollution to Carmel Bay, rock intertidal areas, and wetlands will be avoided to the maximum extent possible.
- Policy 3—Grading and site preparation activities will incorporate design features to prevent soil erosion, repair existing erosion damage within the development footprint and prevent pollution of coastal waters.
- Policy 4—All development will use adequate erosion/sedimentation control and water quality construction Best Management Practices during construction, and all such Best Management Practices will be in place before the commencement of construction and will be maintained in good operating condition through the construction period.
- Policy 5—Erosion control measures (e.g., native vegetation cover, temporary vegetation, seeding, mulching, or other suitable stabilization methods) will be used to protect soils that have been disturbed during grading or development.

Consistency Analysis

[The following sentence has been updated since the draft environmental document was circulated.] The project will implement Caltrans standard measures, standard special provisions, and Best Management Practices for erosion and sedimentation control as provided in Section 1.7 and measures included in the Water Pollution Control Program as discussed in further detail in Section 2.1.10.

No policy inconsistencies are expected.

Water Quality and Erosion

Relevant Policies

California Coastal Act, Chapter 3:

- 30231—Biological Productivity; Water Quality

Del Monte Forest Land Use Plan, Chapter 2 Resource Management Element:

Refer to policies in Freshwater and Marine Resources and Environmentally Sensitive Habitat Areas.

Consistency Analysis

The proposed project includes measures to treat stormwater runoff, limit erosion, and protect groundwater and the water quality of groundwater and receiving waters. Measures will be included in the Water Pollution Control Program prepared before construction.

No policy inconsistencies are expected.

Environmentally Sensitive Habitat Areas, Biological Resources, and Forest Resources

Relevant Policies

California Coastal Act, Chapter 3:

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

Del Monte Forest Land Use Plan, Chapter 2 Resource Management Element:

Key Policy: *The Environmentally Sensitive Habitat Areas of Del Monte Forest are unique, limited, and fragile resources that are sensitive and important biologically and that enrich Del Monte Forest's enjoyment for residents and visitors alike. Accordingly, these areas will be protected, maintained, and, where possible, enhanced and restored in accordance with the policies of this Land Use Plan. Except where specifically and explicitly authorized by the Land Use Plan, all categories of land use and development, both public and private, will be subordinate to the protection of these resources.*

Policies 8, 9, 11, 12, 13, 14, 15, 16, 18, 22, 23 24, 25 are further refinements of the key policy stated above.

Policy 30—The natural forested character of the Del Monte Forest will, to the maximum extent feasible, be retained consistent with the uses allowed by this Land Use Plan. Accordingly, all tree removal, land clearing for development, and forest management activities within native forest areas covered by this Land Use Plan will conform to Land Use Plan policies regarding water and marine resources, Environmentally Sensitive Habitat Areas, and scenic visual resources.

Policy 31—Where Land Use Plan objectives conflict, preference should be given to the long-term protection of the forest resource. All development that could affect trees and/or forest resources will be accompanied by a forest management plan that clearly identifies all aspects of the tree/forest resources in question, including in relation to whether the trees are part of a forest and whether the forest portions of it are considered Environmentally Sensitive Habitat Area.

Policy 33—Siting and Design of development project will be required to minimize the removal of trees and understory vegetation and damage to soil resources.

Policy 34—The natural forest soil cover will be retained in place to the maximum extent possible.

Policy 35—Coastal Hazards and Shoreline Development: Development will be sited and designed to minimize the removal of trees, especially trees that contribute to the visual character of public view corridors.

- Del Monte Forest Coastal Implementation Plan, Section Environmentally Sensitive Habitat Area, and Biology Report) and Section 20.174.050 Forest Management.
- 20.66.020 Standards for Environmentally Sensitive Habitats.

Consistency Analysis

The project will cause permanent and temporary impacts to wetlands, streambeds, and other jurisdictional waters and woody riparian habitats under the regulatory jurisdiction of the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and the California Department of Fish and Wildlife. The project will have permanent and temporary impacts upon designated Environmentally Sensitive Habitat Areas (referred to in the Monterey County's Local Coastal Plan documents as Environmentally Sensitive Habitat Areas, including the Coastal Wetland Environmentally Sensitive Habitat Area, the Riparian Environmentally Sensitive Habitat Area, and the Coastal Stream Environmentally Sensitive Habitat Area, as discussed in detail in Section 2.1.4 Biological Resources.

Compensatory mitigation will be implemented to prevent a net loss of wetlands, waters, and another aquatic resource acreage, function, and value. Mitigation components will include revegetation (restoration, reestablishment), which will be incorporated into Caltrans' Landscape Architecture Landscape Planting Plan and the final Mitigation and Monitoring Plan for the project (refer to Mitigation Measure BIO-1 and Avoidance and Minimization Measures BIO-2 through 9). With the implementation of the mitigation, avoidance, and minimization measures prescribed herein, the proposed project will not have substantially adverse effects on riparian habitat or other sensitive habitat communities identified in the Del Monte Forest Land Use Plan or Coastal Implementation Plan Part 5. In addition, through the implementation of mitigation, minimization, and avoidance measures, the project will

not substantially adversely affect any state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

It was determined that the project may affect and is likely to adversely affect the California red-legged frog under Section 7 of the Federal Endangered Species Act. Caltrans anticipates that the proposed project will qualify for Incidental Take Coverage under the Programmatic Biological Opinion for Projects Funded or Approved under the Federal Highway Administration's Federal Aid Program (U.S. Fish and Wildlife Service 2011). The Programmatic Biological Opinion includes measures designed to avoid or minimize impacts to California red-legged frogs (refer to Avoidance and Minimization Measures BIO-21 through BIO- 34). With the implementation of the measures included in the Biological Opinion and the other avoidance, minimization, and/or mitigation measures outlined in Section 2.1.4, Biological Resources, impacts to special-status species will be reduced, and the project will be consistent with coastal policies.

In accordance with the Del Monte Forest Land Use Plan, a forest management plan will be required for projects in a forested area that require a discretionary permit, and that will remove more than 10 of the following species of trees, regardless of size: Monterey cypress, Gowen cypress, bishop pine, Monterey pine, coast live oak, Pacific madrone, or that will remove at least 1,000 square feet of vegetation (Del Monte Forest Coastal Implementation Plan, Section 20.147.050, Forest Resources, subsection C.6). The project will remove trees and other vegetation as part of the construction processes at some of the culvert repair locations. Monterey Pine is a special-status plant species in Monterey County. The project will directly remove an estimated 17 Monterey pine trees across several of the culvert construction locations. Most of the removed pines will be in the coastal zone. The project will also remove native coast live oak trees at various culvert repair locations. Most of the removed oak trees will be outside the coastal zone. The project area is outside of the indigenous habitat for Monterey cypress.

Compensatory mitigation is proposed for the replacement of all removed Monterey pines and oak trees onsite (within the state highway right-of-way and in the temporary construction easements) and includes planting more trees than are removed to achieve no net loss of trees. Replacement plantings are proposed at varying ratios depending on their size and/or location (jurisdictional or non-jurisdictional habitats and trunk size), as specified in Mitigation Measures BIO-14 and BIO-17. The replanting mitigation will be detailed in the Landscape Planting Plans prepared during the Plans, Specifications, and Estimates phase of the project. All Monterey pines, oaks, and other native vegetation that will remain in the vicinity of the project work areas will be delineated on the design plans. Before ground-disturbing construction activities, temporary Environmentally Sensitive Area fencing will be installed to protect the remaining pines at the affected locations (refer to Measures BIO-14 through BIO-16).

The revegetation mitigation plans will be reviewed for approval by the county as part of the Coastal Development Permit application for the proposed project. With the

removal of only the minimum amount of vegetation required and protection of vegetation adjacent to the work areas, as well as revegetation of the project work areas after construction, including replanting removed native Monterey pines and oak trees onsite and in accordance with specifications in the mitigation measures prescribed in Section 2.1.4, the project will not substantially damage scenic resources in the project area as viewed from the project route as a Scenic Highway.

Overall, with the incorporation of avoidance, minimization, and/or mitigation measures, the project will be consistent with coastal policies related to wetlands and coastal Environmentally Sensitive Habitat Areas and biological resources. See Section 2.1.4, Biological Resources, for more information.

No policy inconsistencies are expected.

Required Permits

Relevant Policies

Monterey County Code—Title 20, Zoning Ordinance

- 20.70.025 Coastal Development Permit: all development as defined by Section 20.06.310 will require a coastal development permit except development exempted by section 20.70.120.

Consistency Analysis

Section 1.8 outlines the permits, licenses, agreements, and certifications that will be required for project construction. Caltrans is undergoing coordination with Monterey County for the Coastal Development Permit application process related to the potential effects of the proposed project on protected coastal resources and Environmentally Sensitive Habitat Areas, as provided in the Del Monte Forest Land Use Plan and Coastal Implementation Plan. An application for a Coastal Development Permit will be submitted to Monterey County upon completion of the final environmental document. The approved permit will specify the required replacement plantings and any other applicable mitigation measures for impacts to protected coastal resources in the coastal jurisdiction.

No policy inconsistencies are expected.

Appendix E Comment Letters and Responses

[Appendix E has been added since the draft environmental document was circulated.] This appendix contains the comments received during the public circulation and comment period from January 21, 2022, to February 21, 2022, retyped for readability. The comment letters are stated verbatim as submitted, with acronyms, abbreviations, and any original grammatical or typographical errors included. A Caltrans response follows each comment presented. Copies of the original comment letters and documents can be found in Volume 2 of this document.

Comment from State Clearinghouse

Comment 1:

The State Clearinghouse is currently not issuing the usual letter that documents the close of the public comment period for draft environmental documents. An email was received from the State Clearinghouse confirming the publication of the draft Initial Study with Proposed Mitigated Negative Declaration on January 21, 2022, with the following information:

From: Meng Heu <Meng.Heu@OPR.CA.GOV>
Sent: Friday, January 21, 2022 8:10 AM
To: O'Connor, Jill@DOT <Jill.OConnor@dot.ca.gov>
Subject: SCH Number 2022010336

Your project is published and the review period has begun. Please use the "navigation" and select "published document" to view your project with attachments on CEQAnet.

Closing Letters: The State Clearinghouse (SCH) will like to inform you that our office will transition from providing close of review period acknowledgement on your CEQA environmental document, at this time. During the phase of not receiving notice on the close of review period, comments submitted by State Agencies at the close of review period (and after) are available on CEQAnet.

Please visit: https://ceqanet.opr.ca.gov/search/advanced

- Filter for the SCH# of your project OR your "Lead Agency"
- If filtering by "Lead Agency"
- Select the correct project
- Only State Agency comments will be available in the "attachments" section: **bold and highlighted**

Thank you for using CEQA Submit.

Meng Heu
Office of Planning and Research (OPR)
State Clearing House

To view your submission, use the following link.
https://ceqasubmit.opr.ca.gov/document/index/275479/1

Caltrans reviewed the CEQANet webpage for the proposed project and, as of April 21, 2022, found there were no comment letters from state agencies.

Comment from Peter Hiller (carmeljspc@sbcglobal.net, email January, 21, 2022)

Comment 1:

My two cents about the proposed drainage project on Hwy 68 is that it also include the proposed roundabouts on that highway – I hate the idea of the work projects creating havoc on traffic twice if it can all be done at the same time.

Response to comment 1: The culvert repair project (05-1J880) will be completed before the Route 68 Corridor Operational Improvements project (05-1J790). The culverts need to be repaired as soon as feasible because they were identified in Caltrans' drainage inspection reports as needing repair or replacement for the longevity of the drainage system. The Route 68 Corridor Operational Improvements project started after the culverts project, and the completion of the environmental studies for the roundabouts/intersection improvements is further out. In addition, these projects have different funding sources, and the timing of funding availability affects the schedules for the completion of design and construction of project improvements. It will not be beneficial to hold off on constructing the culvert repairs to align with the Route 68 Corridor Operational Improvements project, given the delay (at least two years for completion of the first phase of design for the latter project) and the need to repair the culverts as soon as possible.

Comment from Jon Laslett, Ecological Concerns, Incorporated (1/31/22 email, jlaslett@ecologicalconcerns.com):

Comment 1:

My name is Jon, and I'm Director of Operations at Ecological Concerns Incorporated, a habitat restoration firm and native plant nursery. I saw the above referenced project on the CEQA clearinghouse, and I wanted to ask if there are any restoration based mitigation measures associated with the culvert work, and if so, how they are being procured. We'd love to help with restoration plan development, implementation, or growing of plants if there is an opportunity.

Response to comment 1: The culvert repair project will implement restoration-based revegetation mitigation required for project impacts to jurisdictional waters, riparian, wetland, and upland habitats, and the removal of native Monterey pine and coast live oak trees (Initial Study with Mitigated Negative Declaration Measures BIO-1, BIO-7, BIO-14, BIO-17, and BIO-32). The general contractor for the drainage infrastructure repairs will implement erosion control measures after the completion of ground disturbance. A separate contract will be issued for landscape work related to revegetation mitigation and other plantings for the culvert repair project. Information regarding Caltrans' small business department can be found at: https://dot.ca.gov/caltrans-near-me/district-5/district-5-popular-links/d5-small-business and https://www.youtube.com/channel/uc8thdemmp6gfuxfh2xicklg. The Caltrans small business liaison confirmed that the commenter's business is listed as a small business and suggests that the status be kept up to date as needed. The landscape planting restoration contract is anticipated to be advertised in March 2026. Subcontractors should reach out to potential prime contractors that may bid on the landscape restoration work.

Comments from Tom Rowley (verbal comments provided in a phone call to Matt Fowler on February 1, 2022; comment points summarized by Matt Fowler as follows):

Comment 1 (Tom Rowley):

What is happening at Joslyn Canyon and Route 68?

Response to comment 1: Refer to the response to comment 2 below.

Comment 2 (Tom Rowley)

Will there be drainage improvements there as part of this project? The current drainage at Joslyn Canyon Road overflows during big storms and the intersection floods out.

Response to comment 2: The State Route 68 Drainage Improvements project (05-1J880) does not include work at the intersection of Josselyn Canyon Road and State Route 68. The nearest culverts proposed for repair by this project are located 3,168 feet (0.6 mile) to the west and 560 feet east of the Josselyn Canyon Road intersection.

Drainage inlets along Josselyn Canyon Road are within the jurisdiction of the City of Monterey (i.e., outside of Caltrans' state highway right-of-way). Caltrans has communicated with the City of Monterey Hydraulic Engineer Thomas Harty, who is also the Neighborhood and Community Improvement Program Coordinator, about the flooding comment. Harty indicated that he will reach out to the commenter to discuss the issue raised in the comment.

The future Route 68 Corridor Improvement project (Caltrans project 05-1J790) is currently in preliminary design and environmental review. The Route 68 Corridor Improvement project includes improvements at the intersection of Josselyn Canyon Road and State Route 68. For more information on that project, please see the District 5 website at:

https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects/d5-scenic-route-68-improvements.

Comment 3 (Tom Rowley):
Will improvements at the intersection made by this project have to be torn out and redone when the Route 68 Corridor Improvement project goes through? Is there a way to avoid rework?

Response to comment 3: As noted in the response to comment 2 above, this culvert repair project does not include any specific repairs at the Josselyn Canyon Road intersection with State Route 68 that will have to be redone as part of the future Route 68 Corridor Improvement project, 05-1J790. Preliminary construction scheduling information specifies that the Josselyn Canyon Road intersection will be

the last intersection of the Route 68 Corridor Improvement project's phased improvements. Specific scheduling and grouping of the intersection improvements are yet to be finalized. The first intersections of that project are expected to begin construction in July 2027, and the Josselyn intersection is estimated to be a few years thereafter.

Comment 4 (Tom Rowley):

Would like to see the Highway 68 Corridor Improvement environmental document.

Response to comment 4: The draft environmental document for the Route 68 Corridor Improvement project has not yet been released; it is expected to be released to the public in spring 2023.

Comment 5 (Tom Rowley):

Is concerned about congestion on Highway 68 and will like to see a third lane added between Highway 1 and Olmstead.

Response to comment 5: Thank you for your suggestion. Since congestion relief is outside the scope of this drainage improvement project, the comment was passed on to the Route 68 Corridor Improvement team. The drainage improvement project is focused on maintenance improvements to repair and/or replace culverts to extend their service life. For more information about the Route 68 Corridor Improvement project, please see the Caltrans District 5 website at https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects/d5-scenic-route-68-improvements.

Comments from Monterey County Housing and Community Development Department (letter via email, Jaime Scott Guthrie, Planner, 2/18/22):

Comment 1 (Monterey County Housing and Community Development Department)

General comments:

Areas of the project not in the unincorporated County of Monterey Coastal Zone are within the Greater Monterey Peninsula and Toro Area Plans, which comprise Inland areas of unincorporated County of Monterey. Pursuant to Section 15063(d)(5) of the CEQA Guidelines, this IS/MND will include analysis of consistency with the relevant provisions of the 2010 General Plan policies and of the ordinances of the Monterey County Code (MCC).

Response to comment 1: A supplemental analysis of policies and other Monterey County General Plan and Monterey County Code ordinances and provisions is provided in Appendix F of this Initial Study with Mitigated Negative Declaration**.**

Comment 2 (Monterey County Housing and Community Development Department)

Pursuant to MCC 16.60.040.C, removal from unincorporated Inland county of more than three oak trees requires issuance of a Use Permit approved by the Planning Commission, along with a Forest Management Plan prepared by a consulting forester on the County's list.

Response to comment 2: The project's consistency with Monterey County Code Section 16.60.040.C is addressed in Appendix F of the final Initial Study with Mitigated Negative Declaration. As noted in the Initial Study with Mitigated Negative Declaration (Biological Resources Section 2.1.4, Table 2.2, and Appendix D), the project is subject to the requirements of the Del Monte Forest Land Use Plan (Monterey County, May 2012) for impacts to sensitive resources within the land use plan area of the coastal zone. Caltrans will obtain all appropriate permits for this culvert repair project.

As provided in Table 1.2, discretionary permits from Monterey County will be sought for a coastal development permit, temporary construction easements for encroachment within county right-of-way, and drainage easements for long-term culvert maintenance within county property. During the Plans, Specifications, and Estimates phase of the project, an application for a coastal development permit will be submitted to the California Coastal Commission and Monterey County.

The application will include a forest management plan report on the tree resources affected by the project. Oak replacement mitigation is prescribed in measures BIO-17 through BIO-19. As noted in Appendix D of the Initial Study with Mitigated Negative Declaration, a forest management plan will be required for projects in a forested area that requires a discretionary permit and 10 or more of certain sensitive tree species.

Comment 3 (Monterey County Housing and Community Development Department)

Provide narrative as to consistency with Chapter 16.60 Preservation of Oak and Other Protected Trees of the MCC.

Response to comment 3: Refer to Appendix F for policy consistency analyses of the policies listed in the comment.

Comment 4 (Monterey County Housing and Community Development Department)

Proposed mitigation measures for potentially significant impacts on oak woodlands will be in accordance with Public Resources Code (PRC) §21083.4.

Response to comment 4: The project will implement oak replacement mitigation and minimization measures for oak trees to be removed both within and outside of

the state highway right-of-way. Mitigation replacement ratios are prescribed depending on various sizes of the trees at diameter at breast height as identified in Measures BIO-17 through BIO-19 of the Initial Study, consistent with Public Resources Code Section 21083.4 (b)(2).

Comment 5 (Monterey County Housing and Community Development Department)

Mitigation measures requiring a program for training and/or education of onsite personnel (e.g., BIO-10, BIO-22, BIO-41, BIO-44, BIO-50, GHG-8) should include, as in BIO-41, that "upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures."

Response to comment 5: The requested sentence has been added to measures BIO-10, BIO-22, BIO-44, BIO-50, and GHG-8 in the final Initial Study with Mitigated Negative Declaration. The sentence in Measure BIO-41 has been changed to replace the word "employees" with "attendees."

Comment 6 (Monterey County Housing and Community Development Department)

Page 8 under Culvert Repairs typo – The proposed improvements to the 28 culvert systems (25 culvert systems) include…

Response to comment 6: The sentence has been corrected in the final Initial Study with Mitigated Negative Declaration to "The proposed improvements to the 27 culvert repair locations (24 culvert systems)..." Project culvert Location 12 at post mile 3.49 was repaired in April 2022 due to the failure of the drainage infrastructure. Therefore, the total number of culvert repair locations and systems planned for repairs has been reduced by one (each) since the draft Initial Study with Proposed Mitigated Negative Declaration was circulated for public review.

Comment 7 (Monterey County Housing and Community Development Department)

2.1.4 Biological Resources

Include narrative as to project consistency with policies in sections throughout the Del Monte Forest Land Use Plan, as follows: 8, 14, 15, 23, 24, and 25 of Environmentally Sensitive Habitat Areas; 30, 31, 32, 34, and 35 of Forest Resources; and 47, 50, and 51 of Scenic and Visual Resources Policies.

Provide analysis of consistency with the relevant policies of Section 20.147.030 Freshwater and Marine Resources in the Del Monte Forest Coastal Implementation Plan, Part 5.

Response to comment 7: Refer to Appendix F for project consistency analyses of the policies listed in the comment.

Comment 8 (Monterey County Housing and Community Development Department)

Page 41 under Resource Protection Plans and Ordinances:

First paragraph – "Caltrans is coordinating with the county for application to receive a Coastal Development Permit and will implement the final conditions of approval included in the anticipated permit in accordance with the timing required in the condition language (e.g., prior to issuance of permits from Building Services, prior to final inspection).

Third paragraph – "As provided in the Del Monte Forest Land Use Plan, a Forest Management Plan will be required…" (Policy 35 of Forest Resources in the Del Monte Forest Land Use Plan)

Third paragraph – "a revegetation landscape planting plan and maintenance plan that include recommendations for monitoring, adaptive management, and invasive species abatement as mitigation for removed trees…."

Response to comment 8: The requested text edits in the third paragraph, as noted, have been made in the final Initial Study with Mitigated Negative Declaration.

The text in the first paragraph has been changed as follows: "Caltrans is coordinating with the county for an application to receive a Coastal Development Permit and will implement the final conditions of approval included in the anticipated permit in accordance with the timing required in the condition language (e.g., before the issuance of a coastal development permit from Monterey County)."

Comment 9 (Monterey County Housing and Community Development Department)

BIO-3 – delete the phrase "as necessary."

Response to comment 9: The requested edit has been made to Measure BIO-3 in the final Initial Study with Mitigated Negative Declaration.

Comment 10 (Monterey County Housing and Community Development Department)

BIO-33 – Is this mitigation measure required by USACE, USFWS, CDFW, or RWQCB? What method(s) will be used to control invasive, exotic plants? There are invasive plants that thrive in disturbed soils and could be abated successfully with carefully selected non-toxic herbicide. Recommend that the qualified biologist(s) approved by each relevant permitting agency determine appropriate invasive species-specific abatement method.

Response to comment 10: The text of Measure BIO-33 states that Caltrans will not use herbicides as the primary method to control invasive, exotic plants. The

measure summarized information from Caltrans' Programmatic Biological Opinion for California Red-Legged Frog, Minimization of Adverse Effects Measure 18. Measure BIO-33 in the final Initial Study with Mitigated Negative Declaration has been amended to clarify that if Caltrans determines that the use of herbicides is the only feasible method to control invasive, exotic plants at a site, additional protective measures will be implemented to protect California red-legged frogs as applicable per the specific protective measures in Measure 18 in the Biological Opinion for California Red-Legged Frog. Measure BIO-33 has been amended as follows:

However, if Caltrans determines the use of herbicides is the only feasible method for controlling invasive plants at a specific project site, it will implement the following additional protective measures for the California red-legged frog:

a. Caltrans will not use herbicides during the breeding season for the California red-legged frog;
b. b. Caltrans will conduct surveys for the California red-legged frog immediately before the start of any herbicide use. If found, California red-legged frogs will be relocated to suitable habitat far enough from the project area that no direct contact with herbicides will occur;
c. Giant reed and other invasive plants will be cut and hauled out by hand and then painted with glyphosate or glyphosate-based products, such as AquaMaster® or Rodeo®
d. Licensed and experienced Caltrans staff or a licensed and experienced contractor will use a handheld sprayer for foliar application of AquaMaster® or Rodeo® where large monoculture stands occur at an individual project site;
e. All precautions will be taken to ensure that no herbicide is used on native vegetation.
f. Herbicides will not be used on or near open water surfaces (no closer than 60 feet from open water).
g. Foliar applications of herbicide will not occur when wind speeds are more than 3 miles per hour.
h. No herbicides will be used within 24 hours of forecasted rain.

Comment 11 (Monterey County Housing and Community Development Department)

2.1.13 Noise - Pursuant to Section 15063(d)(5) of the CEQA Guidelines, this IS/MND will include analysis of consistency with the provisions of MCC Chapter 10.30 Noise Control ordinance.

Response to comment 11: Refer to Appendix F for policy consistency analyses of the provisions of the Monterey County Code, Chapter 10.30 Noise Control ordinance. Caltrans implements State and federal policies and standard specifications for noise control measures during construction activities to ensure

consistency across the State, including, but not limited to contractor-monitoring of noise such that it does not exceed 86 A-weighted decibels at 50 feet from construction noise sources during nighttime hours.

Comment 12 (Monterey County Housing and Community Development Department)

2.1.19 Utilities and Service Systems - Pursuant to Section 15063(d)(5) of the CEQA Guidelines, this IS/MND will include analysis of consistency with the relevant provisions of MCC Chapter 16.63 Standards for Landscaping ordinance.

Response to comment 12: Refer to Appendix F for policy consistency analyses of the provisions of Chapter 16.63 Standards for Landscaping ordinance in the Monterey County Code.

As discussed in Section 2.1.19 of the Initial Study with Mitigated Negative Declaration, Caltrans implements landscape design standards developed for state transportation facilities. This section of the Initial Study with Mitigated Negative Declaration addresses water use management and conservation in accordance with either the statewide Model Water Efficient Landscape Ordinance or local ordinances where applicable. Caltrans' project landscape architect will identify available water sources and applicable conservation methods as part of the separate landscape design project.

Comments from Monterey Bay Air Resources District (Letter via email 2/18/22, Tyrone Bell, Air Quality Planner)

Comment 1 (Air Resources District):

Thank you for providing the Monterey Bay Air Resources District (Air District) with the opportunity to comment on the Mitigated Negative Declaration for the Proposed State Route 68 Drainage Improvements. The Air District has reviewed the MND and has the following comments:

Air Quality

Please implement the following Best Management Practices if necessary to mitigate fugitive dust and maintain compliance with Air District Rule 402 (Nuisance) and CEQA Guidelines, Section 8.2:

Construction Dust:

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 mph).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations, or hydro-seed area.
- Haul trucks will maintain at least 2'0" of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Install wheel washers or other appropriately effective track-out capture methods at the construction site for all exiting trucks.
- Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints. This person will respond to complaints and take corrective action within 48 hours. The phone number of the Air District will be visible to ensure compliance with Rule 402 (Nuisance).

Construction Equipment:

- To further reduce construction emissions, the Air District recommends using cleaner than required construction equipment that conforms to ARB's Tier 3 or Tier 4 emission standards. We further recommend that whenever feasible, construction equipment use alternative fuels such as compressed natural gas (CNG), propane, electricity, or biodiesel. This will have the added benefit of reducing diesel exhaust emissions.

Sensitive Receptors:

- The Community Hospital of the Monterey Peninsula (CHOMP) and residential areas in the vicinity of the project route should be identified as sensitive receptors to increased emissions and dust generated during project construction.

Smoke Mitigation:

- If the proposed site preparation or construction involves the removal of existing trees, green waste disposal or wood chipping is the Air District's preferred method of disposal over burning. Should any trees be disposed of via wood chipping, please make sure to contact the Air District's Engineering Division at (831) 647-9411 to discuss if a Portable Registration is necessary for the woodchipper being utilized for this project.

Response to comment 1: Construction Dust: Regarding the recommended Best Management Practices for construction dust, in accordance with the CEQA Air Quality Guidelines (2008), Section 8.1, for a project to generate a significant level of construction dust, it will need to generate 82 pounds per day or more of Particulate Matter 10. Because the culvert repair project is a series of individual trenching and trenchless excavation locations dispersed over 15.5 miles on State Route 68, it is expected to generate a fraction of that threshold amount (Particulate Matter 10 emissions estimated at 2.223 pounds per day).

As noted in Section 1.7 of the Initial Study with Mitigated Negative Declaration, Caltrans' Standard Specifications Sections 14-9.02 and 14-11.04 will be implemented as part of the construction contract such that the contractor will be responsible for complying with all local air pollution rules, regulations, ordinances, statutes, and dust control procedures for handling hazardous waste materials. Additionally, the contractor will be required to implement prescribed dust and erosion control measures as part of the Water Pollution Control Program, as discussed in Section 2.1.10 of the Initial Study with Mitigated Negative Declaration.

Construction Equipment, Sensitive Receptors, and Smoke Mitigation: The district's recommendations for construction equipment and alternative fuels are noted. The contractor will be responsible for adhering to all local agencies' air pollution rules, regulations, ordinances, and statutes, as noted in the response above.

Regarding the comment about sensitive receptors, the Community Hospital of the Monterey Peninsula is approximately 1,500 feet from the nearest project location (culvert replacement at post mile 3.62). Section 2.1.13 of the Initial Study with Mitigated Negative Declaration identifies residential land uses within the project limits as near as 100 to 150 feet. The project will implement Caltrans' Standard Specifications Section 14-9.02 Air Pollution Control. The project will comply with applicable air pollution control rules, regulations, ordinances, statutes, and Caltrans' Standard Specifications Section 14-11.04 Dust Control. Excavation, transportation, and handling of material containing hazardous waste or contamination must result in no visible dust migration. When clearing, grubbing, and performing earthwork

operations in areas containing hazardous waste or contamination, a water truck or tank will be provided on the job site. With the implementation of these standard specifications for construction activities, the project will not generate significant dust exposure to nearby sensitive receptors.

The comment regarding smoke mitigation is noted. As per Caltrans Standard Specifications Section 14-9.02 Air Pollution Control, the project will comply with applicable air pollution control rules, regulations, ordinances, and statutes.

Comment 2 (Air Resources District):

Permits Required

Portable Equipment:

- Air District permits or registration with the California Air Resources Board (CARB) may be required for portable construction equipment with engines 50 hp or greater. Please contact the Air District's Engineering Division at (831) 647-9411 if you have questions about permitting.

Response to comment 2: Caltrans' Standard Specifications Section 14-9.02 requires complying with this requirement of the California Air Resources Board.

Comment 3 (Air Resources District):

Hazards and Hazardous Materials

Asbestos:

- The District recommends developing a Standard Operating Procedure to mitigate any unanticipated subsurface asbestos containing utility lines that are exposed during construction work and need to be removed prior to continuing construction.
- If old underground piping or other asbestos containing construction materials are encountered during trenching activities, District Rule 424 may also apply. Please contact Shawn Boyle, Air Quality Compliance Inspector at (831) 718-8010, sboyle@mbard.org for more information regarding asbestos survey and notification requirements, and whether subsurface Transite pipe removal will be within the project's scope.

Response to comment 3: Caltrans has standard procedures and an on-call emergency construction contract in place for the discovery of unanticipated hazardous materials, including asbestos-containing construction materials.

Removal or disturbance of transite pipe or other asbestos-containing construction materials is not anticipated for the project. If unanticipated asbestos-containing construction materials are encountered, the appropriate notifications will be made, and standard procedures followed.

Appendix F Supplemental Land Use Policy Consistency Analysis

F.1 Consistency With Local Inland Land Use Plans, Policies and Ordinances

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
Monterey County General Plan: Greater Monterey Peninsula Area Plan	This cell was intentionally left blank.	This cell was intentionally left blank.
***Conservation Open Space Policy* Greater Monterey Peninsula *3.5*:** Removal of healthy, native oak, Monterey pine, and redwood trees in the Greater Monterey Peninsula planning area will be discouraged.	**Consistent.** A forest management plan will be prepared for the project's removal of native trees, including oaks and Monterey pines, within the Greater Monterey Peninsula Area Plan. Removed Monterey pine trees and oak trees for culvert repair will be replaced, as specified in Mitigation Measures BIO-17 and BIO-14, respectively. Remaining trees within a forest Environmentally Sensitive Habitat Area adjacent to the work areas will be avoided to the greatest extent feasible and protected through the placement of Environmentally Sensitive Area fencing during construction, in accordance with Avoidance and Minimization Measures BIO-15, BIO-16, BIO-18, and BIO-19.	**Consistent.** No trees will be removed because no drainage infrastructure repairs will be made under the No-Build Alternative.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
Monterey County General Plan: ***Toro Area Plan Policy T-3.7:*** (Same wording as Policy Greater Monterey Peninsula 3.5) Removal of healthy, native oak, Monterey pine, and redwood trees will be discouraged.	**Consistent.** A forest management plan will be prepared for the project's removal of native trees, including oaks and Monterey pines, within the Toro Area Plan. Removed native oak and Monterey pine trees for culvert repair will be replaced, as specified in Mitigation Measures BIO-17 and BIO-14, respectively. Remaining trees adjacent to the work areas will be avoided to the greatest extent feasible and protected through the placement of Environmentally Sensitive Area fencing during construction, in accordance with Avoidance and Minimization Measures BIO-15, BIO-16, BIO-18, and BIO-19.	**Consistent.** No trees will be removed because no drainage infrastructure repairs will be done under the No-Build Alternative.
Monterey County General Plan, ***Conservation/Open Space Element Policy OS-4.1***: federally and state listed native marine and freshwater species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant, will be protected. Species designated in Area Plans will also be protected.	**Consistent.** The project's avoidance, minimization, and/or mitigation measures will protect potentially impacted federally and state listed freshwater species and subspecies of birds, mammals, amphibians, reptiles, plants, and other species listed in the applicable local area plans. Measures BIO-21 through BIO-35 will reduce potentially significant impacts to the California red-legged frog and the California tiger salamander to less than significant, respectively. The Build Alternative will not affect federally or state listed freshwater fish or any listed marine species or subspecies of birds, mammals, fish, amphibians, reptiles, or plants.	**Consistent.** No federally or state listed species or subspecies of a bird, mammal, fish, amphibian, reptile, plant, or species designated in the local area will be impacted.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
Monterey County General Plan, *Conservation/Open Space Element Policy OS-4.2*: Direct and indirect discharges of harmful substances into marine waters, rivers, or streams will not exceed state or federal standards.	**Consistent.** Direct and indirect discharges of harmful substances will not exceed state or federal standards. Best Management Practices incorporated for this project will avoid and minimize any discharges of harmful substances into nearby streams.	**Not Consistent.** Drainage systems will not be rehabilitated, and culverts will further deteriorate. Future roadway failure could result and could discharge material with the potential to contain harmful substances into nearby streams.
Monterey County General Plan, *Conservation/Open Space Element Policy OS-5.18*: Prior to disturbing any federal or state jurisdictional areas, all applicable federal and state permitting requirements will be met, including all mitigation measures for the development of jurisdictional areas and associated riparian habitats.	**Consistent.** All applicable federal and state permitting requirements will be met prior to disturbing any federal or state jurisdictional areas. Mitigation measures will adhere to the requirements and schedules of the approved conditions as stipulated by the permitting agency.	**Consistent.** No permits will be required.
Monterey County General Plan, *Safety Element Policy S-3.2:* Best Management Practices to protect groundwater and surface water quality will be incorporated into all development.	**Consistent**. Standard provisions and Best Management Practices will be implemented by the contractor during excavation, dewatering, and other construction activities for avoidance and minimization of impacts to surface and groundwater quality.	**Consistent.** No development will occur.
County General Plan: Del Monte Forest Land Use Plan	This cell was intentionally left blank.	This cell was intentionally left blank.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
Environmentally Sensitive Habitat Areas Section/Policy 8: Environmentally Sensitive Habitat Areas will be protected against any significant disruption of habitat values. Land uses and development adjacent to Environmentally Sensitive Habitat Areas will be compatible with long-term maintenance of the habitat area; such land use and development will be sited and designed to prevent impacts that will significantly degrade the habitat areas.	**Consistent.** Temporary disturbance to Environmentally Sensitive Habitat Areas from culvert construction areas will be minimized and/or avoided through the implementation of Avoidance and Minimization Measures BIO-4 (Environmentally Sensitive Habitat Area fencing around jurisdictional/waters areas), BIO-16 (Environmentally Sensitive Habitat Areas fencing/flagging around Monterey pines adjacent to work areas), and BIO-19 (Environmentally Sensitive Habitat Areas fencing/flagging around coast live oaks adjacent to work areas). Long-term impacts to habitat values will be avoided through the implementation of measures that will restore and replace sensitive habitat types and native trees.	**Not Consistent.** No repair or replacement of the degrading culvert systems will occur; therefore, there will be no direct impacts to Environmentally Sensitive Habitat Areas. However, potential indirect effects on sensitive resources could occur if any existing drainage infrastructure were to fail and cause soil erosion, sedimentation, or hillside undercutting, which could cause impacts to downstream sensitive resources.
Environmentally Sensitive Habitat Area *Section/Policy 14:* Near Environmentally Sensitive Habitat Areas, native vegetation removal and land disturbance will be restricted to the minimum amount necessary to accommodate reasonable development. The development will be sited and designed to prevent impacts that will significantly degrade those nearby areas and will be compatible with the continuance of those habitat areas.	**Consistent.** The individual culvert repair work areas are designed to minimize the amount of native vegetation removal and land disturbance to the extent feasible. Areas of Potential Impact were identified and reduced during the preliminary design phase and will be further refined during the Plans, Specifications, and Estimates phase of the project. Avoidance, minimization, and/or mitigation measures will be implemented to restore and replace all portions of disturbed Environmentally Sensitive Habitat Areas and enable continuance of those areas after project construction is concluded.	**Consistent.** No development or disturbance of native vegetation will occur.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
Environmentally Sensitive Habitat Areas *Section/Policy 15*: The use of non-invasive Del Monte Forest-appropriate native plant species will be required in landscape materials used in projects, and invasive plant species will be prohibited, especially in developments adjoining Environmentally Sensitive Habitat Areas. Non-native and/or invasive plant species should be removed; such removal is encouraged.	**Consistent.** Native plant species appropriate for the Del Monte Forest Land Use Plan area will be incorporated into Caltrans' landscape plans for revegetation of areas disturbed and refurbished after culvert repairs. No invasive plant species will be included in the revegetation.	**Not applicable.** No landscaping or revegetation will occur under the No-Build Alternative.
Environmentally Sensitive Habitat Areas *Section/Policy 23*: Riparian plant communities will be protected by establishing a setback/buffer of at least 100 feet as measured from the outer edge of riparian vegetation. No significant disruption of riparian vegetation will be permitted, and all allowable use/development dependent on the riparian resource, including bridges, will result in long-term habitat enhancement (new habitat value greater than the existing habitat value).	**Consistent.** Avoidance and Minimization Measure BIO-25 specifies that all construction staging, equipment maintenance, and refueling activities will occur at least 100 feet from riparian habitat and water bodies. In addition, Avoidance and Minimization Measure BIO-4 prescribes Environmentally Sensitive Habitat Area fencing around jurisdictional/ waters areas.	**Consistent.** No disturbance of riparian plant communities will occur under the No-Build Alternative.
Environmentally Sensitive Habitat Area *Section/Policy 24*: To protect wildlife habitat values of riparian areas and their adjacent setback/buffer zones, off-road vehicle activity of any type will be prohibited within such areas. General public access should be limited within such areas to designated portions of the setback/buffer area (such as cart paths or trails) sited and designed to avoid impacts to riparian habitat.	**Consistent.** No off-road vehicle activity will be involved with the drainage infrastructure and Transportation Management System improvements. The Build Alternative will not involve development with public access.	**Consistent.** No development will occur with the No-Build Alternative.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
Environmentally Sensitive Habitat Area *Section/Policy 25*: A setback/buffer of at least 100 feet as measured from the edge of wetlands and the mean high water line of the ocean will be provided. No landscape alterations will be allowed in this setback/buffer area unless accomplished in conjunction with restoration and enhancement and unless it is demonstrated that no significant disruption of Environmentally Sensitive Habitat Areas will result.	**Consistent.** No project work will be conducted within 100 feet of the mean high water line of the ocean.	**Consistent.** No disturbance of riparian plant communities near the ocean will occur under the No-Build Alternative.
***Forest Resources Section/ Policy 30*:** The natural forested character of the Del Monte Forest will, to the maximum feasible degree, be retained consistent with the uses allowed by this land use plan.	**Consistent.** Replacement and repair of the existing culverts with the Build Alternative will involve construction work primarily in the immediate areas of the culverts themselves and, in some locations, the creation of access routes for construction equipment. After the temporary construction work, the new and repaired drainage infrastructure will be primarily underground as with the existing conditions. Avoidance, minimization, and/or mitigation measures will replace impacted trees and other native plant communities such that the natural forested character of the Del Monte Forest will be retained in the land use plan area.	**Consistent**. The No-Build Alternative will not repair or replace the degrading culvert systems identified in the project, and therefore, the natural forested character of the Del Monte Forest will be retained.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
Forest Resources Section/ Policy 31: All development that could affect trees and/or forest resources will be accompanied by a forest management plan and where the forest or portions of it are considered Environmentally Sensitive Habitat Areas. Within forest Environmentally Sensitive Habitat Areas, tree removal will be prohibited unless it is part of restoration and enhancement efforts.	**Consistent.** As addressed in Section 2.1.4, Biological Resources, a forest management plan will be prepared for the project's removal of native trees, including oaks and Monterey pines, within the Del Monte Forest Land Use Plan area. In addition, removed Monterey pine trees and oak trees will be replaced as specified in Mitigation Measures BIO-17 and BIO-14, respectively. Remaining trees within a forest Environmentally Sensitive Habitat Area adjacent to the work areas will be avoided to the greatest extent feasible and protected through the placement of Environmentally Sensitive Area fencing during construction, in accordance with Avoidance and Minimization Measures BIO-15, BIO-16, BIO-18, and BIO-19.	**Consistent.** The No-Build Alternative will not create any new development that will affect trees or other forest resources considered Environmentally Sensitive Habitat Areas.
Forest Resources Section/ Policy 32 (furtherance of Policy 31): When reviewing requests for tree removal, environmental considerations will include a review of forest plant associations, native soil cover, fuel management, aesthetic values, tree health, and applicable forest management plans. Preservation of scenic resources will be a primary objective. Special consideration will be given to the ridgeline silhouette and views from significant public viewing areas such as the corridors along State Route 68, the 17-Mile Drive, and the view from distant publicly accessible shoreline areas.	**Consistent.** The planned culvert repairs, lighting, and traffic census equipment will not interfere with views of scenic vistas from State Route 68 since the culvert replacements and associated repairs and the new census station equipment will primarily be underground. The replaced and additional lighting at post mile R4.04 will not generate a significant amount of new light or glare that will affect scenic vistas from and within the highway corridors. As addressed in Section 2.1.4, Biological Resources, a forest management plan will be prepared for the project's removal of native trees, and mitigation measures will be implemented for the replacement of removed trees.	**Consistent.** The No-Build Alternative will not repair any drainage infrastructure or create any new development that will remove trees or other forest resources within scenic vistas.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
***Forest Resources Section/ Policy 34*:** The natural forest soil cover will be retained in place to the maximum extent possible.	**Consistent**. Construction of the culvert repairs will disturb the minimal amount of forest soil areas necessary for access of construction equipment and preparation of cut-and-cover and trenchless construction methods for those repair locations in forested locations. Implementation of Avoidance and Minimization Measure VIS-9 (Section 2.1.1, Aesthetics) will require that new construction staging areas and temporary use areas will be regraded and recontoured as necessary to match the surrounding pre-project topography.	**Consistent.** The No-Build Alternative will not repair or replace the degrading culvert systems identified in the project, and therefore, no forest soil cover will be disturbed.
Forest Resources Section/ Policy 35 (for Subdivisions): development will be sited and designed (e.g., clustered) to minimize the removal of trees, especially trees that significantly contribute to the visual character of public view corridors and that screen the development from public view and neighboring properties. Native trees that are removed will be replaced on the site in accordance with the recommendations of an approved Forest Management Plan with trees of the same variety; replacement trees will be retained and maintained in good condition.	**Consistent.** This policy pertains to proposed subdivision developments in forested areas of the Del Monte Forest Land Use Plan area. A forest management plan will be prepared for the culvert repair project's removal of native trees, including oaks, within the Del Monte Forest Land Use Plan area. Removed oak trees will be replaced as specified in Mitigation Measure BIO-17. Remaining oak trees adjacent to the work areas will be avoided to the greatest extent feasible and protected through the placement of Environmentally Sensitive Area fencing during construction, in accordance with avoidance and minimization measures BIO-18 and -19, respectively.	**Consistent.** No oaks or other sensitive tree species will be removed; preparation of a Forest Management Plan will not be required.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
Scenic and Visual Resources Section/Policy 47: Views from designated public access areas and vista points, from State Route 68 and 17-Mile Drive corridors, and of ridgelines as seen from the public viewing areas identified in Figure 3, will be protected as resources of public importance, and development that could adversely impact such views will only be allowed where it protects, preserves, and if feasible enhances, such scenic resources. Conservation and scenic easements will be required as one means of protecting such views in perpetuity.	**Consistent.** The planned culvert repairs, lighting, and traffic census equipment will not interfere with views of scenic vistas from State Route 68 or the 17-Mile Drive. The culvert replacements, associated repairs, and new census station equipment will primarily be underground. The replaced and additional lighting at post mile R4.04 will not generate a significant amount of new light or glare that will affect scenic vistas from and within the highway corridors.	**Consistent.** The No-Build Alternative will not affect the existing scenic views from State Route 68 or the 17-Mile Drive as it will not alter the existing drainage infrastructure or add new lighting or traffic census station equipment underground.
Scenic and Visual Resources Section/Policy 50: Utility lines will be placed underground, typically within road access footprints, except where 1) such undergrounding will result in the removal of native trees and 2) it can be shown that the lines can be hidden from public view using different siting and design approaches (e.g., planning lines behind existing vegetation or structures, etc.).	**Consistent.** No new utilities will be installed with the Build Alternative. Relocation of existing utilities is not expected to be necessary for the Build Alternative. Utility locations will be confirmed during the Plans, Specifications, and Estimates phase of the project. Should existing utility lines be required to be relocated for replacement of the project culverts or installation of new traffic census stations, the relocation areas will be reviewed with the intent to avoid or minimize any sensitive resources, including trees, to the extent feasible.	**Consistent.** The No-Build Alternative will not affect existing utility lines or add new infrastructure or utilities.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
***Scenic and Visual Resources Section/Policy 51*:** Live tree removal will be prohibited in undeveloped areas unless it is consistent with all other Land Use Plan policies and any Forest Management Plan applicable to the area in question.	**Consistent.** The Build Alternative will implement tree replacement mitigation as prescribed in Section 2.1.4 of the final Initial Study with Mitigated Negative Declaration. A forest management plan will be prepared for the removal of sensitive tree species. Also, refer to the consistency discussion below for County Code ordinance *Chapter 16.60: Preservation of Oak and Other Protected Trees* (16.60.20).	**Consistent.** The No-Build Alternative will not remove any trees within undeveloped areas.
Del Monte Forest Coastal Implementation Plan, Part 5, Section 20.147.030 Freshwater and Marine Resources: A. Development Standards to protect water quality and effects on water resources, including limitation on land clearing operations during the wet season (October 15 to April 15); Avoidance or mitigation of point and non-point sources of pollution to the Carmel Bay "Area of Special Biological Significance," rocky intertidal areas, and wetlands; Incorporation of design features to prevent soil erosion, repair existing erosion damage within the development footprint, and prevent pollution of coastal waters; Implementation of erosion/sediment control and water quality construction Best Management Practices during construction.	**Consistent.** This section is addressed in Appendix D, Coastal Policy Consistency Analysis; see Del Monte Forest Land Use Plan, Chapter 2 Resource Management Element, Coastal Implementation Plan, Part 5.	**Not Consistent.** No land clearing operations will be conducted under the No-Build Alternative. However, erosion and sedimentation from failing drainage culverts will potentially occur if the culverts are not repaired/replaced, causing potential water quality pollution in downstream sensitive freshwater and marine resources.
Monterey County Code Ordinance	This cell was intentionally left blank.	This cell was intentionally left blank.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
***Chapter 16.60: Preservation of Oak and Other Protected Trees:* (16.60.20)**: The provisions of this chapter are applicable throughout the unincorporated area of the County of Monterey outside the Coastal Zone. *Subsection 16.60.30 A*. No oak or madrone tree 6 inches or more in diameter 2 feet above ground level will be removed in the North County Area Plan or Toro Area Plan areas without the approval of the permit(s) required in Section 16.60.040 of this Chapter. ***Ordinance 16.60.040.C: Removal of More than Three Protected Trees*:** Removal of more than three protected trees on a lot in a one-year period will require a Forest Management Plan prepared by a consulting forester on the County's list and approval of a Use Permit by the Monterey County Planning Commission. All tree removal requests under this subsection will be subject to the requirements of the California Environmental Quality Act.	**Consistent.** As noted in Section 2.1.4, Biological Resources, a forest management plan will be prepared for the removal of native trees, including oaks, within the Del Monte Forest Land Use Plan area. In addition, removed oak trees will be replaced as specified in Mitigation Measure BIO-17, and remaining oak trees adjacent to the work areas will be avoided to the greatest extent feasible and protected through the placement of Environmentally Sensitive Area fencing during construction, in accordance with Avoidance and Minimization Measures BIO-18 and BIO-19, respectively.	**Consistent.** The No-Build Alternative will not remove any oaks or other sensitive tree species in the County and, therefore, will not require the preparation of a forest management plan.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
Chapter 10.30 Noise Control: Amends Chapter 10.60 of the County Code regulating noise by adding a noise detection standard prohibiting nighttime noise that is "plainly audible" at a distance of 50 feet from the source. Also amends the nighttime period to start at 9 p.m. and end at 7 a.m.	**Not Applicable.** Caltrans follows State and federal guidelines to ensure consistency across the state. However, the State standards are very similar to local standards and include the following standard noise protection measures: Standard Specifications Section 14-8.02 requires the contractor to control and monitor construction noise to not exceed 86 A-weighted decibels at 50 feet from the noise source during the evening and overnight hours (9:00 p.m. to 6:00 a.m.). The contractor will implement avoidance and minimization noise control measures as specified in Section 2.1.13 of the Initial Study with Mitigated Negative Declaration as feasible, such as grouping loud equipment together, shielding loud, stationary equipment from sensitive noise receptors, and use of newer equipment that is quieter and has manufacturers' recommended noise abatement measures intact and operational (such as mufflers, engine covers, and engine vibration isolators).	**Not Applicable.** The No-Build Alternative will not cause any construction noise.

Policy/Ordinance Summary	Build Alternative	No-Build Alternative
Chapter 16.63 Standards for Landscaping. 16.63.010 Purpose: This chapter is to provide a path for the design, installation, management, and maintenance of landscaping and irrigation within the built environment by establishing landscape standards that minimize water use, eliminate water waste and maximize energy efficiency by requiring low water landscape plantings, irrigation methods, and low energy lighting and ornamental landscape features in unincorporated Monterey County. This chapter is intended to be at least as effective in water conservation as the state Model Water Efficient Landscape Ordinance and is intended to apply in lieu of the Model Water Efficient Landscape Ordinance. ***Section 16.63.030 - Applicability***: The provisions of this chapter apply to all zoning districts in the coastal and non-coastal unincorporated areas of Monterey County: New construction projects, new landscapes, and construction projects with rehabilitated landscapes of an aggregate area equal to or greater than 2,500 square feet, that require a grading permit, building permit, or design approval.	**Consistent.** As discussed in Section 2.1.19 of the Initial Study with Mitigated Negative Declaration, Caltrans implements water conservation elements as standard procedures for landscape planting and irrigation design. Caltrans highway landscape design is required to comply with either the Model Water Efficient Landscape Ordinance or local ordinances where applicable. The aggregate landscape restoration for the culvert repairs will be about 77,000 square feet, considered a Major landscape project according to the ordinance. The landscape planting and irrigation design for the project replacement plantings will include methods to minimize the usage of potable water for plant establishment. Caltrans standard landscape planning implements a goal of a 50 percent reduction in water usage from the year 2013 in accordance with executive orders. Water use for new landscape plantings will be temporary and irrigation lines removed after successful plant establishment. Therefore, the Build alternative will be consistent with the provisions of Monterey County Code Section 16.63. Landscape design plans for the restoration areas at each culvert work site and temporary construction easement area, as applicable, will be shared with the county for input during the Plans, Specifications, and Estimates phase of project work.	**Not Applicable.** The No-Build Alternative will not establish restorative landscape planting at the culvert locations as there will be no repair work and related water use under this alternative.

Appendix G Summary of Avoidance, Minimization, and Mitigation Measures

The following includes the avoidance, minimization, and mitigation measures by topic from Chapter 2 of this Initial Study with Mitigated Negative Declaration.

Aesthetics - Avoidance and Minimization Measures:

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: All disturbed areas will be revegetated with native plant species appropriate to each specific work location.

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

VIS-4: 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 will be determined by the Caltrans District 5 Landscape Architecture Program.

VIS-5: All visible metal components related to down drains 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 will be determined by the Caltrans District 5 Landscape Architecture Program.

VIS-6: All visible rock slope protection should be placed in natural-appearing shapes rather than in geometric patterns to the greatest extent possible to reduce its engineered appearance.

VIS-7: Following placement of rock slope protection, the visible rock should be colored to blend with the surroundings and reduce reflectivity. The specific color will be determined by the Caltrans District 5 Landscape Architecture Program.

VIS-8: Metal roadside elements, including but not limited to guardrail, guardrail transitions, and end treatments, should be stained or darkened to be visually compatible with the rural setting. The color will be determined and approved by the Caltrans District 5 Landscape Architecture Program.

VIS-9: Following construction, all new construction staging areas and other temporary uses will be regraded and recontoured as necessary to match the surrounding pre-project topography.

Biological Resources – Compensatory Mitigation Measures

Jurisdictional Waters/Aquatic Resources, Yadon's Piperia, California Red-legged Frog, Western Pond Turtle, Coast Range Newt, Western Spadefoot:

BIO-1: Restoration (reestablishment) of impacted jurisdictional waters is proposed at a 1-to-1 ratio (acreage) for temporary impacts. Compensatory mitigation is proposed at a 3-to-1 ratio (acreage) for permanent impacts and a 1.5-to-1 ratio (acreage) for degradation impacts (e.g., installation of rock slope protection over gravel filter). Replacement plantings will include appropriate native tree and understory species and will include developed planting specifications and grading plans to ensure the survival of planted vegetation and reestablishment of functions and values. The project will also implement measures required by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the Coastal Development Permits as part of the project permitting process. A three-year plant establishment period, monitoring, semiannual (twice per year) inspections, weeding, and plant replacement, as necessary, will be implemented for Culvert Locations 6 (post mile 2.20), 8 (post mile 2.73), 9 (post mile 2.80), 19 (post mile 6.32), 20 (post mile 9.05) and 23 (post mile 10.29).

Monterey Pine

BIO-14: Monterey pine trees will be replaced onsite at a 1-to-1 ratio in non-jurisdictional areas. Monterey pines that are less than 24 inches in diameter at breast height and in jurisdictional areas will be replaced at a 3-to-1 ratio, and Monterey pines that are 24 inches or larger in diameter at breast height in jurisdictional areas will be replaced at a 10-to-1 ratio. Replacement plantings will be detailed in the project Landscape Planting Plans. Tree plantings will be monitored to ensure successful revegetation at six months and then once a year for three years.

Oak Woodlands

BIO-17: Coast live oak trees will be replaced onsite at a 1-to-1 ratio in non-jurisdictional areas. Coast live oak trees that are less than 24 inches in diameter at breast height and occur within jurisdictional areas will be replaced at a 3-to-1 ratio. Coast live oak trees that are 24 inches or larger in diameter at breast height and occur within jurisdictional areas will be replaced at a 10-to-1 ratio. Replacement plantings will be detailed in the project Landscape Planting Plans. Tree plantings will be monitored to ensure successful revegetation at six months and then once a year for three years.

California Tiger Salamander

BIO-35: The Section 2081 Incidental Take Permit to be acquired for the proposed project is expected to require compensatory habitat mitigation and permanent protection and perpetual management of up to 0.018 acre for permanent impacts to potential California tiger salamander upland habitat (up to a 3-to-1 compensatory mitigation ratio for 0.006 acre of permanent impacts) and up to 2.427 acres for temporary impacts to potential California tiger salamander upland and breeding habitat (up to a 1-to-1 compensatory mitigation ratio for 2.427 acres of temporary impacts), resulting in an anticipated compensatory mitigation lands total of 2.445 acres.

Before starting ground-disturbing or vegetation-disturbing project activities, Caltrans will satisfy the requirement to provide an anticipated 2.445 acres of California tiger salamander habitat by complying with one of the following:

a. Purchase credits equivalent of up to 2.445 acres at a California Endangered Species Act-certified and California Department of Fish and Wildlife-approved Conservation Bank (in a location to be determined) authorized to sell credits for California tiger salamander; or,
b. Acquire, permanently preserve, and perpetually manage up to 2.445 acres of Habitat Management Lands

Biological Resources – Avoidance and Minimization Measures

Avoidance and Minimization Measures for Jurisdictional Areas of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife, and Coastal Zone:

BIO-2: Before construction, Caltrans will obtain a Section 404 Nationwide Permit from the U.S. Army Corps of Engineers, a Section 401 Water Quality Certification from the Regional Water Quality Control Board, and a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife. All permit terms and conditions will be incorporated into construction plans and implemented.

BIO-3: Before construction, Caltrans will prepare a Restoration, Mitigation, and Monitoring Plan to document measures to avoid, minimize, and mitigate impacts to vegetation and natural habitats. The Restoration, Mitigation, and Monitoring Plan will be consistent with federal and state regulatory requirements and will be amended with any regulatory permit conditions, as required. Caltrans will implement the Restoration, Mitigation, and Monitoring Plan during construction and immediately following project completion.

BIO-4: Before any ground-disturbing activities, Environmentally Sensitive Area fencing will be installed around jurisdictional waters, and the dripline of trees to be protected within the project limits. Caltrans-defined Environmentally Sensitive Areas will be noted on design plans and delineated in the field before the start of construction activities.

BIO-5: Construction activities in jurisdictional waters and temporary stream diversion will be timed to occur between June 1 and October 31 in any given year, or as otherwise directed by the regulatory agencies, when the surface water is likely to be dry or at a seasonal minimum. Deviations from this work window will only be made with permission from the relevant regulatory agencies.

BIO-6: During construction, all project-related hazardous materials spills within the project site will be cleaned up immediately. Readily accessible spill prevention and cleanup materials will be kept by the contractor onsite at all times during construction.

BIO-7: During construction, erosion control measures will be implemented. Fiber rolls and barriers will be installed as needed between the project site and jurisdictional other waters and riparian habitat. At a minimum, erosion controls will be maintained by the contractor on a daily basis throughout the construction period.

BIO-8: During construction, the staging areas will conform to Best Management Practices applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles will be checked and maintained by the contractor on a daily basis to ensure proper operation and avoid potential leaks or spills.

BIO-9: Before the removal of the diversion, stream contours will be restored as close as possible to their original condition.

Avoidance and Minimization Measures for Yadon's Piperia

BIO-10: An environmental training program will be developed to educate construction personnel about special-status plant and animal species with the potential to be encountered during construction and the avoidance measures being used to prevent impacts to these species. Upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures.

BIO-11: Before the start of construction activities, biological monitors will conduct preconstruction surveys. If the biological monitors identify that work could affect a listed plant species, they will notify the resident engineer immediately. The resident engineer will resolve the situation by eliminating the effect immediately or requiring that all actions that are causing the effects to be stopped until coordination with the appropriate resource agency is completed.

Avoidance and Minimization Measures for Invasive Species

BIO-12: During construction, Caltrans will ensure that the spread or introduction of invasive, exotic plant species will be avoided to the maximum extent possible.

BIO-13: Only clean fill will be imported. When practicable, invasive, exotic plants in the project site will be removed and disposed of properly. Inclusion of any species that occurs on the California Invasive Plant Council's Invasive Plant Inventory in the

Caltrans erosion control seed mix or landscaping plans for the project will be avoided.

Avoidance and Minimization Measures for Monterey Pine

BIO-15: Removal of Monterey pines will be avoided to the greatest extent possible.

BIO-16: All Monterey pine trees that will remain in the project vicinity will be delineated on design plans. Before ground-disturbing activities, temporary Environmentally Sensitive Area fencing or flagging will be installed around trees to be protected.

Avoidance and Minimization Measures for Oak Woodlands

BIO-18: Removal of coast live oak trees will be avoided to the greatest extent feasible.

BIO-19: All coast live oak trees that will remain in the project vicinity will be delineated on design plans. Before ground-disturbing activities, temporary Environmentally Sensitive Area fencing or flagging will be installed around trees to be protected.

Avoidance and Minimization Measures for Special-Status Plant Species - Hooker's Manzanita and Sandmat Manzanita

BIO-20: Temporary high visibility fencing will be used to establish Environmentally Sensitive Areas during construction to ensure full avoidance of hooker's manzanita and sandmat manzanita plants that were mapped during surveys.

Special-Status Animal Species

Avoidance and Minimization Measures in Accordance with the Programmatic Biological Opinion for California Red-Legged Frog

Caltrans anticipates the proposed project will qualify for Federal Endangered Species Act incidental take coverage under the Programmatic Biological Opinion for Projects Funded or Approved under the Federal Highway Administration's Federal Aid Program (U.S. Fish and Wildlife Service 2011) (California red-legged frog Programmatic Biological Opinion), which includes the following applicable measures.

BIO-21: A U.S. Fish and Wildlife Service-approved biologist will survey the project area at locations with suitable California red-legged frog habitat no more than 48 hours before the start of work activities. If found, the U.S. Fish and Wildlife Service-approved biologist will relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and will not be affected by the activities associated with the project. The relocation site will be in the same drainage to the extent practicable.

BIO-22: Before any activities begin on a project, a U.S. Fish and Wildlife Service-approved biologist will conduct a training session for all construction personnel. At a minimum, the training will 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. Upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures.

BIO-23: A U.S. Fish and Wildlife Service-approved biologist will be present at the project locations with suitable California red-legged frog habitat until all California red-legged frogs have been removed, workers have been instructed, and initial disturbance of habitat has been completed. If work is stopped because California red-legged frogs will be affected in a manner not anticipated by Caltrans and U.S. Fish and Wildlife Service during a review of the proposed action, they will notify the resident engineer immediately. When work is stopped, U.S. Fish and Wildlife Service will be notified as soon as possible.

BIO-24: During project activities, all trash that may attract predators or scavengers will be properly contained, removed from the worksite, and disposed of at the end of each workweek. Following construction, all trash and debris will be removed from work areas.

BIO-25: All refueling, maintenance, and staging of equipment and vehicles will occur at least 100 feet from riparian habitat or water bodies and not in a location from where a spill will drain directly toward aquatic habitat unless otherwise preapproved by the necessary agencies.

BIO-26: Habitat contours will be returned to a natural configuration at the end of the project activities. This measure will be implemented in all areas disturbed by activities associated with the project at locations with suitable California red-legged frog habitat unless the U.S. Fish and Wildlife Service and Caltrans determine that it is not feasible or modification of original contours will benefit the California red-legged frog.

BIO-27: The number of access routes, size of staging areas, and the total area of activity will be limited to the minimum necessary to achieve the project. Environmentally Sensitive Areas will be established 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-28: Caltrans will attempt to schedule work for times of the year when impacts to the California red-legged frog will be minimal. For example, work that will affect large pools that may support breeding will be avoided, to the maximum degree practicable, during the breeding season (November through May).

BIO-29: To control sedimentation during and after project completion, Caltrans will implement Best Management Practices outlined in any authorizations or permits issued under the authorities of the Clean Water Act received for the project.

BIO-30: If a worksite is to be temporarily dewatered by pumping, intakes will be completely screened with wire mesh not larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. Water will 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 will be removed in a manner that will allow flow to resume with the least disturbance to the substrate. Alteration of the streambed will be minimized to the maximum extent possible; any imported material will be removed from the streambed upon completion of the project.

BIO-31: Unless approved by U.S. Fish and Wildlife Service, water will not be impounded in a manner that may attract California red-legged frogs.

BIO-32: Project sites will be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials will be used to the extent practicable. Invasive, exotic plants will be controlled to the maximum extent practicable.

BIO-33: Caltrans will not use herbicides as the primary method to control invasive, exotic plants.

If Caltrans determines that the use of herbicides is the only feasible method to control invasive, exotic plants at a site, the following additional protective measures will be implemented to protect California red-legged frogs as applicable in accordance with the following specific protective measures in Measure 18 in the Biological Opinion for California Red-legged Frog:

a. Caltrans will not use herbicides during the breeding season for the California red-legged frog;
b. Caltrans will conduct surveys for the California red-legged frog immediately prior to the start of any herbicide use. If found, California red-legged frogs will be relocated to suitable habitat far enough from the project area that no direct contact with herbicides will occur;
c. Giant reed and other invasive plants will be cut and hauled out by hand and then painted with glyphosate or glyphosate-based products, such as Aquamaster® or Rodeo®
d. Licensed and experienced Caltrans staff or a licensed and experienced contractor will use a handheld sprayer for foliar application of AquaMaster® or Rodeo® where large monoculture stands occur at an individual project site;
e. All precautions will be taken to ensure that no herbicide is applied to native vegetation.

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

g. Foliar applications of herbicide will not occur when wind speeds are more than 3 miles per hour.

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

BIO-34: Upon completion of the project, Caltrans will ensure that a Project Completion Report is completed and provided to U.S. Fish and Wildlife Service, following the template provided with the Programmatic Biological Opinion.

Avoidance and Minimization Measures for California Tiger Salamander

BIO-36: All avoidance and minimization measures for dewatering activities previously described for California red-legged frog will also apply to California tiger salamander. During dewatering activities, a biologist approved by the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife will be onsite for the duration of dewatering activities to ensure there are no impacts to the California tiger salamander as a result of dewatering.

BIO-37: Caltrans will obtain U.S. Fish and Wildlife Service and California Department of Fish and Wildlife approval of biologist(s) before project-related activities that may result in impacts to the California tiger salamander. An approved biologist will be present at all surveys and during all initial ground-disturbing activities in areas of potential California tiger salamander habitat to help minimize or avoid impact to the California tiger salamander and to minimize disturbance of habitat.

BIO-38: Designated Monitors may monitor project activities after initial ground-disturbing activities have been completed. If the Biologist or Designated Monitor recommends that work be stopped, they will notify the resident engineer immediately. The resident engineer will resolve the situation by requiring that all actions that are causing these effects are halted.

BIO-39: Biologists and/or Designated Monitors will ensure that their activities do not transmit diseases or pathogens harmful to amphibians, such as chytrid fungus (Batrachochytrium dendrobatidis), by following the fieldwork code of practice developed by the Declining Amphibian Populations Task Force.

BIO-40: Ground disturbance will not begin until written approval is received from the U.S. Fish and Wildlife Service that the biologist is qualified to conduct the work.

BIO-41: Before any construction activities begin, the approved biologist will conduct an education program for all persons employed or otherwise working on the project site before performing any work onsite. The program will include a discussion of the biology of the California tiger salamander and project-specific avoidance and minimization measures. Upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures.

BIO-42: During project activities, all trash that may attract predators will be properly contained, removed from the worksite, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.

BIO-43: All refueling, maintenance, and staging of equipment and vehicles will occur at least 60 feet from riparian and pond habitat. Measures will be taken to avoid situations where a spill could drain directly toward aquatic habitat.

Avoidance and Minimization Measures for Western Pond Turtle

Implementation of many of the measures outlined for California red-legged frogs will avoid and minimize impacts to individuals of this species. Additionally, Best Management Practices implemented to avoid impacts on water quality will avoid impacts on aquatic habitat for the western pond turtle. The following specific avoidance and minimization measures will be implemented for potential impacts to western pond turtles:

BIO-44: Before mobilization of construction equipment, Caltrans will conduct a worker environmental training program including a description of the western pond turtle, their legal/protected status, proximity to the project site, and avoidance/minimization measures to be implemented during the project. Upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures.

BIO-45: Before the start of construction activities, a qualified biologist will survey the Area of Potential Impact at jurisdictional locations and, if present, capture and relocate any western pond turtles to suitable habitat outside of the Area of Potential Impact. Observations of western pond turtles will be documented on the California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

Avoidance and Minimization Measures for Coast Range Newt and Western Spadefoot

BIO-46: A preconstruction survey before the start of ground disturbance will occur at locations with suitable coast range newt habitat and at location 24 (post mile 10.56) with suitable western spadefoot habitat by a Caltrans biologist. If any individuals are found to be present, individuals will be relocated by a qualified biologist to a nearby location with suitable habitat. Observations of coast range newt and/or western spadefoot will be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

Avoidance and Minimization Measures for Two-Striped Gartersnake and California Legless Lizard

BIO-47: A Caltrans biologist will conduct a preconstruction survey before the start of ground disturbance at locations with suitable habitats for two-striped gartersnakes and California legless lizards. If present, individuals will be relocated by a qualified

biologist to a nearby location with suitable habitat. Observations of two-striped gartersnakes and California legless lizards will be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

Avoidance and Minimization Measures for American Badger

BIO-48: Within 30 days before initiation of site disturbance and/or construction, a qualified biologist will conduct a pre-activity (i.e., preconstruction) survey for American badger dens in areas with suitable habitat for the species within the Area of Potential Impact (post mile 13.84 and post mile 15.65). If an active den for American badger is discovered, a 100-foot buffer will be implemented to avoid the den. If an active pupping den is discovered, no work may proceed within the 100-foot buffer until the young are grown and no longer dependent on the natal den. Reductions in the buffer will be contingent on coordination with the California Department of Fish and Wildlife to determine an appropriate alternative avoidance strategy.

During project construction, if any observations are made of American badgers, including dead animals, or if dens are discovered within or adjacent to the project limits, the contractor will contact the Caltrans Project Biologist. All work will stop within 100 feet of a live animal or active den until the Caltrans Biologist determines it is appropriate to resume work.

Avoidance and Minimization Measures for Monterey Dusky-Footed Woodrat

BIO-49: Preconstruction surveys for Monterey dusky-footed woodrat nests will be conducted within and adjacent to the project area at post mile 6.32 (Location 19) and post mile 10.29 (Location 23). If active nests are found within the project area, the biologist will flag the area to establish a 25-foot buffer around active nests where work will not occur. If nests are present in a location that cannot be avoided by work activities, before starting work at this location, Caltrans biologists will deconstruct woodrat nests during the nonbreeding season to minimize impacts on breeding success. Observations of Monterey dusky-footed woodrat will be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

Avoidance and Minimization Measures for Tricolored Blackbird

BIO-50: A Caltrans biologist or qualified representative will provide workers training and/or informational material to be used in identifying tricolored blackbirds, protocols for responding to their presence within the construction area, and notification procedures if they arrive in the construction area. Upon completion of a training program, attendees will sign a form stating they attended the program and understand all protection measures.

BIO-51: Construction at Location 24 (post mile 10.56) will occur outside of the tricolored blackbird nesting season (March 1-August 31). A work window between

September 1 and September 30 will be implemented to avoid impacting nesting tricolored blackbirds.

BIO-52: Two preconstruction nesting surveys for tricolored blackbirds will be conducted within a 500-foot area around Location 24 (post mile 10.56), 1) within 30 days of construction activities, and 2) no more than 3 days before the start of ground-disturbing activities. A Caltrans Biologist will be contacted at least 14 days before the start of construction activities to schedule preconstruction surveys. If an active tricolored blackbird nest is found, a Caltrans biologist will establish a 500-foot buffer around the active nest until the young have fledged. Work will not occur within the buffer until the young have fledged and the nest is determined to no longer be active.

Avoidance and Minimization Measures for Other Nesting Birds

The following measures apply to all birds protected by the Migratory Bird Treaty Act and the 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 included in Table 6 of the project's Natural Environment Study. There are no formal survey protocols for most of these bird species, but the California Department of Fish and Wildlife typically requires preconstruction nesting bird surveys and avoidance of impacts to active bird nests.

BIO-53: If feasible and regulatory approvals allow, tree removal for this project will be scheduled to occur from October 1 to January 31, outside of the typical nesting bird season, to avoid potential impacts to nesting birds.

If tree and other vegetation removal or other construction activities are proposed to occur within 100 feet of potential nesting habitat during the nesting season (February 1 to September 30), a nesting bird survey will be conducted by a biologist determined qualified by Caltrans no more than three days before construction. If an active nest is found, Caltrans will determine an appropriate buffer based on the habits and needs of the species. The buffer area will be avoided until a qualified biologist has determined that juveniles have fledged.

BIO-54: During construction, active bird nests will not be disturbed, and eggs or young birds covered by the Migratory Bird Treaty Act and the California Fish and Game Code will not be killed, destroyed, injured, or harassed at any time. Readily visible exclusion zones where nests must be avoided will be established by a qualified biologist. Work in exclusion zones will be avoided until young birds have fledged (permanently left the nest) or the qualified biologist has determined that nesting activity has otherwise ceased.

Greenhouse Gas Reduction Strategies

GHG-1: Reduce construction waste and maximize the use of recycled materials, including but not limited to the replaced culvert pipes, joints, and other components,

stockpiling pavement grindings for future use, salvaging rebar from demolished concrete, and processing waste to create usable fill.

GHG-2: Operate construction equipment with improved fuel efficiency by:

Properly tuning and maintaining equipment

Limiting idling to five minutes for delivery and dump trucks and other diesel-powered equipment

Using the right-sized equipment for the job

Using equipment with newer technologies

Use of alternative fuels such as renewable diesel as feasible

Produce hot mix asphalt with warm mix technology

GHG-3: Balance earthwork (cut and fill quantities) to reduce the need for transport of earthen materials.

GHG-4: Schedule truck trips outside of peak morning and evening commute hours.

GHG-5: Reduce water consumption during construction and prioritize the use of recycled water for construction needs.

GHG-6: Salvage large trees that are removed and repurpose them for lumber, landscaping, or other onsite beneficial uses as feasible.

GHG-7: Improve carbon sequestration rates through the application of compost before seeding and replanting disturbed areas and the use of compost socks in place of straw wattles.

GHG-8: Conduct construction environmental training to provide construction personnel with information regarding methods to reduce greenhouse gas emissions related to construction. Upon completion of the program, attendees will sign a form stating they attended the program and understand all protection measures.

GHG-9: Maintain pedestrian, bicycle, and transit access throughout construction.

Hazards and Hazardous Materials – Avoidance and Minimization Measures

HAZ-1: If unexploded ordnance is discovered during construction or maintenance activities at Culvert Location 25 (post mile 13.84), procedural protocols will be followed in accordance with the Ordnance and Explosives at Former Fort Ord Pamphlet as included in the Initial Site Assessment Technical Memorandum (December 1, 2021). If any suspected unexploded ordnance objects are discovered during project construction or maintenance activities, the objects are not to be

touched. The location of the objects will be marked, and emergency services (911) called to report what has been found. These protocols will be included in the project construction plans, specifications and estimates, and the culvert database.

HAZ-2: Access onto Assessor's Parcel Number 031-011-014-000 (federal property) will be prohibited during any construction and maintenance activities for Culvert Location 25 at post mile 13.84. The subject federal property where it borders the north side of the culvert work area will be designated an Environmentally Sensitive Area. An Environmentally Sensitive Area fence will be installed along the right-of-way boundary before any construction or maintenance activities. No personnel, equipment, or work will be allowed beyond the state highway right-of-way. The Environmentally Sensitive Area fence will be delineated on the construction plans, and Caltrans' Environmental Construction Liaison will monitor and confirm the correct placement of the fence. The access restriction will be noted in the culvert database.

Noise - Avoidance and Minimization Measures

N-1: The Caltrans District 5 Public Information Office, as advised by the project's resident engineer, will notify the public two weeks before scheduled construction activities that are expected to produce an adverse noise environment. Notice of the dates and duration of the construction activities will be published in local news media for the locations affected.

N-2: The construction contractor will shield loud pieces of stationary construction equipment if complaints are received from the public.

N-3: The construction contractor will locate portable generators, air compressors, and other loud equipment away from sensitive noise receptors as feasible.

N-4: The construction contractor will limit the grouping of major pieces of equipment operating in one area to the greatest extent feasible.

N-5: The construction contractor will use newer equipment that is quieter and will ensure that all equipment items have the manufacturer's 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 will be equipped with a muffler or baffle of a type recommended by the manufacturer.

N-6: The construction contractor and resident engineer will consult with District 5 noise staff if complaints are received during construction activities.

List of Technical Studies and Other Documents Bound Separately (Volume 2)

Air Quality, Greenhouse Gas, Noise, and Water Quality Technical Memorandum (August 10, 2021)

Natural Environment Study and Jurisdictional Delineation Report (December 21, 2021)

Location Hydraulic Study (August 15, 2021)

Cultural Resources Screened Undertaking Memorandum (November 18, 2021)

Climate Change Technical Report (November 2021)

Hazardous Waste Initial Site Assessment (December 1, 2021)

Visual Impact Assessment (September 22, 2021)

Paleontological Identification Report (December 1, 2021)

Public Comments on the draft Initial Study with Proposed Mitigated Negative Declaration

List of Threatened and Endangered Species (U.S. Fish and Wildlife Service, May 12, 2022)

Biological Opinion (U.S. Fish and Wildlife Service, May 23, 2022)

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

Matt C. Fowler
District 5 Environmental Division
California Department of Transportation
50 Higuera Street, San Luis Obispo, California 93401

Or send your request via email to: matt.c.fowler@dot.ca.gov
Or call: 805-779-0793

Please provide the following information in your request:

Project title: State Route 68 Drainage Improvements
General location information: Multiple culvert improvements along State Route 68 in Monterey County from west of Sunset Drive to the Toro Park Undercrossing
District number-county code-route-post mile: 05-MON-68-PM 0.2-15.7
Project ID Number: 0518000083/Project EA 05-1J880