COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: February 28, 2024

TO: Planning Commission

FROM: Planning Staff

SUBJECT: EXECUTIVE SUMMARY: Consideration of a Coastal Development Permit, pursuant to Section 6328.4 of the County Zoning Regulations, for the implementation of the State Route 1 Multi-Asset Roadway Rehabilitation Project in unincorporated San Mateo County. This project is appealable to the California Coastal Commission.

County File Number: PLN2023-00390 (Caltrans)

PROPOSAL

The California Department of Transportation, District 4 (Caltrans) is proposing the State Route 1 (SR-1) Multi-Asset Roadway Rehabilitation Project (Project) to rehabilitate existing pavement, improve existing traffic facilities, install Complete Streets elements, and install traffic operations system elements along SR-1 in San Mateo County. The Project also proposes to install traffic operation system elements at two locations on State Route 92. The Project will include rehabilitating pavement; replacing existing drainage inlets, culverts, and dikes; replacing existing guardrails with Midwest guardrail systems; replacing existing crash cushions; upgrading curb ramps; implementing complete street elements (bicycle, pedestrian, and transit facilities); upgrading signal poles; installing conduits; installing traffic operation system elements (intersection cameras, closed circuit television cameras, and traffic monitoring stations); and relocating and/or replacing utility cabinets. The Project is within both the unincorporated area of the County and the City of Half Moon Bay. This Coastal Development Permit (CDP) application covers only the portion of the Project area within the unincorporated area of San Mateo County.

RECOMMENDATION

That the Planning Commission approve the CDP, County File Number PLN2023-00390, by adopting the required findings and conditions of approval contained in Attachment A.

SUMMARY

The purpose of the Project is to preserve and extend the life of the roadway to a condition that will require minimal maintenance expenditures, improve the ride quality, replace drainage systems, improve roadway safety, enhance pedestrian and bicycle access, and upgrade the traffic system infrastructure. The pavement on SR-1 in the Project area was evaluated by Caltrans in 2016 and found to be in poor condition overall. If left untreated, this portion of SR-1 will continue to provide poor ride quality to users and will require frequent, expensive maintenance. Portions of the highway are near the acceptable roughness threshold, but continued pavement degradation is expected over time. In addition, existing highway elements and facilities in the Project area are worn out or functionally obsolete and need to be replaced. The current traffic systems (e.g., guard rails, crash cushions, and drainage) are approaching the end of their functional life and need to be upgraded. The Project has been designed in collaboration with both the County and the City of Half Moon Bay to avoid potential conflicts with other local projects.

Caltrans plans to begin construction in 2025. The Project is anticipated to be completed across two construction seasons (i.e., when construction can occur without the need to implement special provisions for winter conditions). However, ground-disturbing work will occur and be restored on site within each work season for any work area. Construction activities may occur in both daytime and nighttime hours. Construction completion date is anticipated to be in the year 2026. The Project will be constructed within Caltrans ROW and will not alter existing or future land uses.

20240228_PLN2023-00390_PCES_WPC_FINAL

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RECOMMENDATION

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BACKGROUND

Report Prepared By: Luis Topete, Project Planner III

Applicant: State of California Department of Transportation, District 4

Owner: State of California Department of Transportation

Public Notification: Ten (10) day advanced notification for the hearing was mailed to all property owners and residents within 300 feet of the perimeter of the project parcels and a notice for the hearing posted in a newspaper (San Mateo County Times) of general public circulation.

Location: The Project area is on SR-1 between post mile (PM) 27.5 (SR-1 at Marine Boulevard in Moss Beach) and PM 34.8 (SR-1 at Wavecrest Road in the City of Half Moon Bay); and SR-92 at PM 0.2 (at Main Street). Portions of the larger Project lie within the boundaries of the City of Half Moon Bay. This CDP application covers only the portion of the Project area within the unincorporated area of San Mateo County.

APN(s): California Department of Transportation Public Right-of-Way (ROW)
*Caltrans rights of way are those properties owned and operated by the Department of Transportation (Caltrans) for transportation purposes. This may include land, access rights, or both.

Size: Approximately 7.3-mile-long corridor of State Route 1. Approximately half the Project area is in County jurisdiction and the other portion is in the City of Half Moon Bay.

Existing Zoning: One-Family Residential/S-17 Combining District/Design Review/ Coastal Development (R-1/S-17/DR/CD); One-Family Residential/S-94 Combining District/Design Review/Coastal Development (R-1/S-94/DR/CD); Resource Management-Coastal Zone/Design Review/Coastal Development (RM-CZ/DR/CD); El Granada Gateway/Design Review (EG/DR); Coastside Commercial Recreation/Design Review/Coastal Development (CCR/DR/CD); Light Industrial/Design Review/Coastal Development (M-1/DR/CD)

General Plan Designation: The SR-1 ROW is not within a mapped County General Plan Land Use Designation.

Local Coastal Plan Designations: The SR-1 ROW is not within a mapped County Local Coastal Plan Land Use Designation.

Existing Land Use: State Highway and adjacent residential, open space, agricultural, commercial, recreational, and Half Moon Bay Airport areas.

Flood Zone: Zone X (Areas of Minimal Flood Hazard). Various FEMA Community Panels.

Scenic Corridor: Cabrillo Highway (SR-1) County Scenic Corridor

Environmental Evaluation: Caltrans, as the California Environmental Quality Act (CEQA) Lead Agency, prepared an Initial Study/Negative Declaration (IS/ND) which was circulated to the public for 30 days between July 8, 2022, and August 8, 2022. Caltrans subsequently filed a Notice of Determination with the State Clearinghouse on October 21, 2022. As a Responsible Agency, the County was noticed during Caltrans' CEQA review process. The County provided a comment letter to which Caltrans provided a response. The potential environmental effects of the project identified in the Negative Declaration have been reviewed and considered during evaluation of this application.

Setting: The Project area includes paved and compacted areas of SR-1 and potential habitat directly adjacent to the roadway within the Caltrans Right-of-Way. State Route1 runs north/south, parallel to the Pacific coast on the coastal plain west of the Santa Cruz mountains. The existing roadway consists of a conventional highway with one lane in each direction, each lane being 12 feet in width. State Route1 along this corridor is subject to heavy traffic, and, as a result, there are often high levels of noise and vibrational baseline disturbance. Creeks flow west and southwest from the Santa Cruz mountains to the Pacific Ocean across the coastal plain and through the Project area. The named drainages that cross the Project area are Denniston Creek, Deer Creek, Arroyo de en Medio, Frenchman's Creek, and Pilarcitos Creek. The northern portion of the Project is surrounded by the Half Moon Bay Airport to the west and agricultural fields to the east. Farther south, the Project is surrounded by Pillar Point Harbor, suburban residential development, and commercial developments. In addition, multiple publicly accessible open space and beach areas are adjacent to the Project area. There are pockets and corridors of undeveloped vegetated areas adjacent to SR-1, between other land uses. The entire stretch of the Project is within sight of the Pacific Ocean, but is too far upslope from the ocean to have any tidal influence.

Chronology:

Date		Action
September 23, 2021	-	Preliminary stakeholder outreach meeting hosted by Caltrans. Invited attendees included staff/representatives from the Half Moon Bay Coastside Chamber of Commerce, City of Half Moon Bay, Midcoast Community Council, California Coastal Commission, and San Mateo County.
March 8, 2022	-	Caltrans hosted another stakeholders meeting to provide an update on the project prior to the release of the draft IS/ND.

		Same stakeholders as the 09/23/2021 meeting were in attendance.
July 8, 2022	-	Caltrans circulated the IS/ND for 30-day public comment period.
July 21, 2022	-	Caltrans hosted an online public meeting to share information on the project and to answer questions about the Draft IS/ND.
October 21, 2022	-	Caltrans filed the Notice of Determination with the State Clearinghouse.
December 13, 2023	-	Application received by the San Mateo County Planning and Building Department.
January 8, 2024	-	Application deemed complete.
February 28, 2024	-	Planning Commission hearing.

DISCUSSION

The purpose of the Project is to preserve and extend the life of the roadway to a condition that will require minimal maintenance expenditures, improve the ride quality, replace drainage systems, improve roadway safety, enhance pedestrian and bicycle access, and upgrade the traffic system infrastructure.

The pavement on SR-1 in the Project area was evaluated by Caltrans in 2016 and found to be in poor condition overall. Caltrans uses the International Roughness Index to evaluate and determine how smooth or rough a pavement surface is. The Federal Highway Administration (FHWA) International Roughness Index threshold for acceptable pavement surface is between 170 and 96, the threshold for good road surface is 95 or less, and surfaces that are greater than 170 do not meet the acceptable threshold. The stretch of Project highway pavement surface ranges from 100 to 226. If left untreated, this portion of SR-1 will continue to provide poor ride quality to users and will require frequent, expensive maintenance. Portions of the highway are near the acceptable roughness threshold, but continued pavement degradation is expected over time. In addition, existing highway elements and facilities in the Project area are worn out or functionally obsolete and need to be replaced. The current traffic systems (e.g., guard rails, crash cushions, and drainage) are approaching the end of their functional life and need to be upgraded.

A summary of the Project Elements are as follows:

- Roadway Rehabilitation: Caltrans proposes a 20-year flexible rehabilitation pavement strategy to address poor pavement conditions. To rehabilitate the roadway, Caltrans will cold plane (mill the roadway surface down to design

depths to restore and smooth the roadway conditions) 0.40 foot of existing asphalt concrete pavement, then replace it with a structural section composed of 0.20 foot of gap-graded rubberized hot-mix asphalt, a 0.25-foot hot-mix asphalt and geosynthetic pavement interlayer, and 0.10 foot of hot-mix asphalt. The roadway profile will be raised by about 0.15 foot at project completion. Pavement rehabilitation will occur across the entire Project location.

- Replace Existing Guardrails: Existing guardrails in the Project area will be removed and replaced with standard Midwest guardrail systems. Vegetation removal to access guardrails may be required, and relatively minor excavation will be necessary during construction to install wood posts. Wood support posts will be installed by post driver to an approximate depth of 4 feet below the ground.

- Replace Existing Crash Cushions: Existing nonstandard or damaged crash cushions in the Project area will be replaced at the same locations with new crash cushions that meet current Caltrans standards for design and safety.

- Upgrade Signal Poles: Nonstandard poles in the Project area will be replaced. Excavation will be required during replacement.

- Install Conduits and Traffic Operation System Elements: Caltrans will upgrade and install new communication devices, such as closed-circuit television cameras, fixed intersection cameras, and traffic monitoring stations. New conduit installation to support these elements will require trenching during installation.

- Road Shoulder Reworking: Caltrans will rework and pave approximately 2,500 linear feet of existing road shoulders to full depth structure at select locations split across the Project area to meet roadway design requirements.

- Replace Existing Drainage Inlets, Culverts, and Dikes: Caltrans' hydraulic engineers have reviewed existing drainage elements and have recommended repair and replacement of select existing drainage features in kind. No new drainage features will be added where they do not currently exist, no drainage features will be increased in size, and drainage patterns will not be altered.

- Bicycle and Pedestrian Improvements (Complete Streets Elements): Sidewalks, curb ramps, and markings will be constructed throughout the Project area to provide access for pedestrians and cyclists. Complete street elements included as part of the Project include: milling and overlaying of the existing Multi-Modal Class I Bike Trail; adding Class II Bikeway striping along the SR-1 corridor in both directions from Wavecrest Road to South of

Marine Boulevard; upgrading existing curb ramps and sidewalks at select locations to meet current ADA standards; updating SamTrans bus stops at select locations to meet current bus stop design standards by constructing additional landing areas; and restriping of select crosswalks.

- Utility Relocation: Existing utilities will be relocated during construction as required. Utility relocation is expected to remain within the Project footprint. Some utilities may require vegetation clearance and excavation during construction.

"Complete Streets" is a Caltrans policy directive intended to provide safe mobility for all users, including bicyclists and pedestrians, and is a consideration during Project development. According to Director's Policy 37, signed on December 7, 2021, it is Caltrans' organizational priority to encourage and maximize walking, bicycling, transit, and passenger rail as a strategy to not only meet state climate, health, equity, and environmental goals but also to foster socially and economically vibrant, thriving, and resilient communities (Caltrans 2021). Therefore, Complete Streets elements (e.g., curb ramps, sidewalks, and crosswalks) are included in the Project design.

The Project has been designed in collaboration with both the County and the City of Half Moon Bay to avoid potential conflicts with other local projects. The Project's design incorporates both the City of Half Moon Bay's Highway 1 North Main Street project and the County's Mid-Coast Multi-Modal Trail Improvements Project, as part of the existing conditions.

Caltrans plans to begin construction in 2025. The Project is anticipated to be completed across two construction seasons (i.e., when construction can occur without the need to implement special provisions for winter conditions). However, ground-disturbing work will occur and be restored on site within each work season for any work area. Construction activities may occur in both daytime and nighttime hours. Construction completion date is anticipated to be in the year 2026. The Project will be constructed within Caltrans ROW and will not alter existing or future land uses.

A. KEY ISSUES

1. Conformance with the County General Plan

The County's Local Coastal Program (LCP) is a subset of the County General Plan, and the two documents are internally consistent. The following analysis of the project's consistency with the LCP, which is more specific than the General Plan with regard to issues raised by this project, also addresses, by extension, the project's consistency with the County's General Plan.

2. Conformance with the Local Coastal Program

A Coastal Development Permit is required pursuant to San Mateo County LCP Policy 2.1, which mandates compliance with the California Coastal Act for any government agency or special district wishing to undertake development in the Coastal Zone. Summarized below are the sections of the LCP that are relevant to this project:

a. Public Works Component

Policy 2.10 *(Coordination with the City of Half Moon Bay)*. This policy requires that the policies of the City's LCP be considered when determining when and how much to increase the capacity of all public works facilities. No roadway capacity increase is being proposed, but Caltrans has been coordinating with the City of Half Moon Bay for compliance with the City's LCP requirements applicable to this Project.

Policy 2.50 *(Improvements for Bicycle and Pedestrian Trails)*. Item (h) of this policy states that no roadway repair or maintenance project may block or damage any existing or formally planned public trail segment, and if such an impact is not avoidable, that an equal or better trail connection be provided in conjunction with that repair and maintenance project either directly by Caltrans or through Caltrans' funding to a third party. The Project does not block or damage any existing or formally planned public trail segment. The Project will improve and enhance existing transit, roadway, bicycle, and pedestrian facilities in the Project area. The Project is being planned and designed to be constructed and operated to meet current Caltrans' Complete Streets policies. The applicant has indicated that the Project will be consistent with all applicable plans, including the Caltrans District 4 Bike Plan, Caltrans District 4 Pedestrian Plan, San Mateo County General Plan Transportation Policies, CCAG San Mateo County Comprehensive Bicycle and Pedestrian Plan, City of Half Moon Bay General Plan Circulation Element, and City of Half Moon Bay Bicycle and Pedestrian Master Plan.

b. Sensitive Habitats Component

Policy 7.1 (*Definition of Sensitive Habitats)*. This policy defines sensitive habitats as any area in which plant or animal life or their habitats are either rare or especially valuable. Sensitive habitats have been identified and mapped in the project's Biological Study Area (BSA), which consists of the Project footprint (permanent or temporary impact areas, including staging and access areas), along with buffer areas (surrounding the Project footprint) that construction activities may directly or indirectly impact. The Project's BSA contains potential

habitat for special-status species that have moderate to high potential to occur. Appendix B of the IS/ND contains a summary table of the potential for special-status species to occur, based on literature/database searches, biological surveys, evaluation of appropriate habitat, and the habitat and life history requirements for each species.

Policy 7.3 (*Protection of Sensitive Habitats*). This policy requires that development in areas adjacent to sensitive habitats be sited and designed to prevent impacts that could significantly degrade the sensitive habitats. Sensitive habitats exist in the Biological Study Area. However, Project activities will not result in impacts on these habitats, with implementation of Project features and the avoidance and minimization measures for biological resources presented in Appendix C of the IS/ND.

Policy 7.5 (*Permit Conditions*). This policy requires, as part of the development review process, that the applicant demonstrate that there will be no significant impact on sensitive habitats. In order to address this policy, applicants must submit a biological report outlining what resources exist at the project location and how the project may impact those resources. The applicant has submitted a biological assessment that identifies federally listed species having potential to occur in the area, evaluates potential effects on aquatic, upland and dispersal habitats, including cumulative impacts, and proposes avoidance and minimization measures. The specific avoidance and minimization measures that will be implemented to reduce impacts on listed, candidate, and proposed wildlife species and their habitats have been incorporated as a condition of approval for this project.

Policy 7.8 (*Designation of Riparian Corridors*). This policy requires the establishment of riparian corridors for all perennial and intermittent streams and lakes and other bodies of freshwater in the Coastal Zone. The BSA contains perennial, intermittent, and ephemeral drainages that span SR-1 and are delineated as other waters of the United States.

Policy 7.10 (*Performance Standards in Riparian Corridors*). This policy requires ten specific performance standards for development permitted in riparian corridors. All riparian habitat in the Project area will be delineated as an environmentally sensitive area (ESA), and no construction activities will occur outside of the immediate work area in these environmentally sensitive areas. Wetlands, waters, riparian habitat, designated critical habitat, and special-status species habitat will also be delineated as ESAs on contract plans and defined in contract specifications. Environmentally sensitive areas outside of the

proposed work areas will be specifically identified to avoid during construction. Where work must occur in or adjacent to an ESA, an approved biologist with stop-work authority will be present. Work in wetlands, waters, and riparian habitat will be limited to June 15 through October 15 to avoid or minimize impacts to waters of the United States, waters of the state, riparian habitat, and special-status species habitat. Potential impacts are anticipated to be temporary and will be offset by project measures to restore disturbed areas to a condition that will be equal or better than that which existed prior to project construction.

Policy 7.14 (*Definition of Wetland*). This policy defines a wetland as an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground. Potential jurisdictional wetlands (0.009 acre) were delineated in the Biological Study Area.

Policy 7.17 (*Performance Standards in Wetlands*). This policy requires that development permitted in wetlands minimize adverse impacts during and after construction and lists seven specific requirements to achieve this outcome. Permanent impacts to wetlands and waters will be avoided because the new drainage system elements will be rehabilitated entirely within the footprint of the existing elements. Wetlands, waters, riparian habitat, designated critical habitat, and special-status species habitat will be delineated as ESAs on contract plans and defined in contract specifications. Environmentally sensitive areas outside of the proposed work areas will be specifically identified to avoid during construction. Where work must occur in or adjacent to an ESA, an approved biologist with stop-work authority will be present. Work in wetlands, waters, and riparian habitat will be limited to June 15 through October 15 to avoid or minimize impacts to waters of the United States, waters of the state, riparian habitat, and special-status species habitat. Potential impacts are anticipated to be temporary and will be offset by project measures to restore disturbed areas to a condition that will be equal or better than that which existed prior to project construction.

Policy 7.34 (*Permit Conditions*). This policy requires, in addition to the conditions set forth in Policy 7.5, that prior to permit issuance, a qualified biologist prepare a report which defines the requirements of rare and endangered organisms and lists the minimum elements the report should discuss. A biological assessment, dated September 2023, was prepared by a qualified biologist to provide technical information to the United States Fish and Wildlife Service (USFWS) for formal consultation under Section 7 of the Federal Endangered

Species Act (FESA). The biological assessment details species and critical habitats assessed, evaluates potential Project effects on rare and endangered species and their habitats, map's locations of plants, animals and/or their habitats, and proposes avoidance and minimization measures. Further, the assessment details the Project's regulatory requirements, consultation history, resource agency coordination, study methods, personnel, and survey dates. Special-status plant surveys, aquatic resource delineation surveys, and special-status wildlife studies and surveys were completed as part of this assessment.

Policy 7.35 (*Preservation of Critical Habitats*). This policy requires preservation of all habitats of rare and endangered species using criteria including, but not limited to, Section 6325.2 (*Primary Fish and Wildlife Habitat Area Criteria*) and Section 6325.7 (*Primary Natural Vegetative Areas Criteria*) of the Resource Management Zoning District. The California red-legged frog and San Francisco garter snake were identified as federally listed species having the potential to occur in the Project area. However, critical habitat for the California red-legged does not occur in the Project footprint. Critical habitat has not been designated for the San Francisco garter snake and this species was not observed on site during reconnaissance site visits. One special-status plant species, Orndorff's meadowfoam, was observed during two of the surveys in 2022. No additional special-status plant species were observed in the Biological Study Area. With incorporation of the best management practices and avoidance minimization measures proposed, the project will not contribute to substantial cumulative effects on special-status plant species.

In the BSA, Denniston Creek, Frenchman's Creek, and Pilarcitos Creek are designated as critical habitat for California Central Coast steelhead distinct population segment. However, no culvert replacement or other instream work will occur at these three creeks. Work near these waterways will be limited to guardrail replacement in the current footprint of road shoulder areas, and there will be no impacts to aquatic or riparian habitat. Work may involve vegetation removal from the road shoulder or the trimming of tree branches that overhang the road shoulder, but this limited form of vegetation removal is not expected to result in any decrease in shading or otherwise impact areas potentially supporting steelhead. Implementation of the project will include erosion and sedimentation controls to prevent siltation or water quality degradation from impacting potential habitat for steelhead. Culvert replacement work will occur at other locations of the Project, but those waterways are not expected to support steelhead, and they all feed directly into the

Pacific Ocean and thus are not tributaries to waterways that may support steelhead.

Policy 7.36 (*San Francisco Garter Snake*). This policy requires prevention of any development where there is known to be a riparian or wetland location for the San Francisco garter snake, with some exceptions, and for developers to conduct sufficiently detailed analyses of any construction which could impair the potential or existing migration routes of the San Francisco garter snake to determine appropriate mitigation measures. All potential aquatic habitats in the Project area for San Francisco garter snake are non-breeding aquatic habitat. The Project is not anticipated to permanently affect aquatic habitats. The Project will have temporary impacts on less than 0.01 acre of existing non-breeding aquatic habitat that occurs in roadside culverts, drainage ditches, and creeks. The Project area supports upland habitat for the San Francisco garter snake and is anticipated to have no permanent impacts on upland habitat, with an estimated 0.05 acres of temporary impacts to upland habitat. The Project is anticipated to permanently affect 0.38 acre, and temporarily affect 0.43 acre of dispersal habitat. However, the 0.38 acre of permanent effects on dispersal habitat are low-quality along roadside edges and will not create new dispersal barriers affecting San Francisco garter snake dispersal in the Project area.

Project designers have used mapped biological resources in the Project area, including the habitats of the San Francisco garter snakes, to inform the design of the project and avoid sensitive biological resources including San Francisco garter snake upland and non-breeding aquatic habitats. To avoid entanglement or injury of San Francisco garter snake, erosion control materials that use plastic or synthetic monofilament netting will not be used. Safety permitting, the USFWS-approved biological monitor will survey areas of disturbed soil for signs of San Francisco garter snake within 30 minutes following initial disturbance of a given area. The need for further pre-construction surveys will be determined by the biologist based on site conditions and realized construction timelines. The USFWS-approved biological monitor(s) will have the authority to halt work through coordination with the resident engineer if San Francisco garter snake are observed in the project footprint. The resident engineer will keep construction activities suspended in a 50-foot radius of the San Francisco garter snake in any construction area where the biologist has determined that a potential take of the species could occur. Work will resume after observed listed individuals leave the site voluntarily, the biologist determines that no wildlife is being harassed or harmed by construction activities, or the wildlife is relocated by the biologist to a release site using USFWS-approved handling techniques.

c. Visual Resources Component

Policy 8.23 *(Utilities in County Scenic Corridors)*. This policy requires new distribution lines to be installed underground, except as otherwise provided in three listed exceptions. The Project is within the Cabrillo Highway (SR-1) County Scenic Corridor. The Project will not require installation of new utilities but will connect to existing utilities, to power closed-circuit television cameras, fixed-intersection cameras, and traffic monitoring systems. Existing utilities in the Project area may require temporary or permanent relocation. Any interruption of service associated with utility connections or relocations during construction will be temporary and short-term.

Policy 8.31 (*Regulation of Scenic Corridors in Rural Areas*). This policy requires application of the policies of the Scenic Road Element of the County General Plan; application of Section 6325.1 (Primary Scenic Resources Areas Criteria) of the Resource Management (RM) Zoning District; application of the Rural Design Policies of the LCP; and application of the Policies for Landforms and Vegetative Forms of the Local Coastal Program. Certain stretches of SR-1 have scenic vistas, and those scenic qualities have been considered during Project development and design to avoid substantial adverse effects on scenic vistas. Existing nonstandard guardrails will be replaced with Midwest guardrail systems. Additionally, existing nonstandard and damaged crash cushions will be replaced. Conduits and TMS loops will not be visible, as they will both be installed underneath the roadway. CCTV and fixed intersection cameras will be a minor change to existing signal poles at certain highway intersections and will not diminish the visual quality of the scenic corridor. The Project will also add new bicycle lanes and striped crosswalks and will bring existing curb ramps and sidewalks up to ADA standards, making it easier and safer for pedestrians and bicyclists to travel along this section of SR-1 and enjoy its scenic qualities.

The Project will not adversely affect scenic vistas along SR-1 or SR-92. Caltrans will implement standard project features to avoid and minimize visual and aesthetic impacts from the overall Project, as summarized in Section 1.7, Table 1-2 of the IS/ND. As an avoidance and minimization measure, Caltrans will include a matte finish on guard rail exposed metal surfaces to reduce glare. Concrete used for the Project (e.g., for roadway rehabilitation and ADA-compliant curb ramps) will generally match existing aesthetics. Based on the Project features incorporated into the Project design and avoidance and minimization measures proposed, the Project will be compatible with existing scenic and visual quality. The alignments and scenic characteristics of SR-1 and SR-92 will be maintained.

3. Conformance with Zoning Regulations

The Coastal Act of 1976 requires that the County's Local Coastal Program (LCP) include zoning ordinances, zoning district maps and any other actions necessary to implement the requirements of the Coastal Act in San Mateo County. To that end, all projects, including government projects, must show compliance with not only the LCP Policies, but with the applicable zoning regulations of the district in which the project is located.

The approximately 3.65-mile stretch of Project area roadway within the unincorporated area of the County traverses various zoning districts, which include: R-1/S-17/DR/CD; R-1/S-94/DR/CD; RM-CZ/DR/CD; EG/DR; CCR/DR/CD; and M-1/DR/CD. The proposed Project includes rehabilitating existing pavement, improving existing traffic facilities, installing Complete Streets elements, and installing traffic operations system elements along State Route1. While the different Project components are not expressly listed as an allowed use in these various zoning districts, the Project does not propose any new land uses, will not conflict with any existing or future land uses in the area, is fully within the Caltrans ROW, and does not conflict with identified standards or trigger additional permitting requirements of the various applicable zoning districts. State Route1 is the primary north-south transportation artery for the San Mateo Coastside. The proposed Project is deemed necessary to preserve and extend the life of the roadway to a condition that will require minimal maintenance expenditures, improve the ride quality, replace drainage systems, improve roadway safety, enhance pedestrian and bicycle access, and upgrade the traffic system infrastructure. The Design Review Administrator confirmed that the project is exempt from design review.

B. ENVIRONMENTAL REVIEW

Caltrans, as the CEQA Lead Agency, prepared an Initial Study/Negative Declaration which was circulated to the public for 30 days between July 8, 2022, and August 8, 2022. Caltrans subsequently filed a Notice of Determination with the State Clearinghouse on October 21, 2022. As a Responsible Agency, the County was noticed during Caltrans' CEQA review process. On August 17, 2022, the County provided a comment letter on the draft environmental document. In summary, the County recommended updates to the final environmental document to reflect the Board of Supervisor's adopted "Connect the Coastside" transportation plan, requested additional transit stop amenities be considered, further investigation to address pedestrian crossing of SR 1 as part of the Project's culvert replacement/repair at Arroyo de en Medio, requested access to the data collected by Caltrans' traffic management systems, identified the requirement for a CDP from the County, asked for the permit jurisdictions of the Project to be clarified, highlighted potential LCP consistency issues, and recommended revisions to discrepancies found. Generally, Caltrans received and

considered the County's comments, made requested revisions, agreed to the County's recommendations, provided clarification, and/or explained how items requested are not within the scope of the Project. The County's comment letter and Caltrans' response can be found in Attachment J. The potential environmental effects of the project identified in the Negative Declaration prepared by Caltrans have been reviewed and considered during evaluation of this application.

C. REVIEWING AGENCIES

California Coastal Commission
California Department of Fish and Wildlife
City/Council Association of Governments of San Mateo County
City of Half Moon Bay
Coastside Fire Protection District
Midcoast Community Council
Regional Water Quality Control Board
San Mateo County Building Department
San Mateo County Department of Public Works
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service

ATTACHMENTS

A. Recommended Findings and Conditions of Approval
B. Vicinity Map
C. Project Element Figures
D. Project Work Areas
E. Draft 95% Plans (SMC Only)
F. Supplemental Information
G. Initial Study / Negative Declaration
H. Notice of Determination
I. Avoidance and Minimization Measures
J. SMC Comment Letter/Caltrans Response on the IS/ND

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Attachment A

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN2023-00390 Hearing Date: February 28, 2024

Prepared By: Luis Topete, Project Planner III For Adoption By: Planning Commission

RECOMMENDED FINDINGS

Regarding the Environmental Review, Find:

1. That the Commission, acting as a Responsible Agency, has reviewed and considered the Initial Study and Negative Declaration prepared by the Lead Agency, the California Department of Transportation, and has considered the environmental effects of the project as shown in the Negative Declaration.

Regarding the Coastal Development Permit, Find:

2. That the project, as described in the application and accompanying materials required by Zoning Regulations Section 6328.7, and as conditioned in accordance with Section 6328.14, conforms with the plans, policies, requirements, and standards of the San Mateo County Local Coastal Program with regards to the Public Works, Sensitive Habitats and Visual Resources Components of the Local Coastal Program. See Section A (2) of the staff report for the supporting analysis demonstrating conformance with the Local Coastal Program.

3. That the project is not subject to the public access and public recreation policies of Chapter 3 of the Coastal Act of 1976 (commencing with Section 30200 of the Public Resources Code) since the project is not located between the nearest public road and the sea.

4. That the project conforms to specific findings required by policies of the San Mateo County LCP as detailed in Section A (2) of this staff report. See Section A (2) for the supporting analysis.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. The approval applies only to the proposal as described in this report and materials submitted for review and approval by the Planning Commission on February 28, 2024. The Director of Planning and Building may approve minor revisions or modifications to the project if they are found to be consistent with the intent of, and in substantial conformance with this approval.

2. All temporarily disturbed previously vegetated areas will be contoured to preconstruction grades, where appropriate, and replanted with appropriate native vegetation.

3. Graded areas shall be protected from erosion using a combination of silt fences, fiber rolls, and erosion control netting (jute or coir) as appropriate.

4. Dust control measures shall include use of water trucks and dust palliatives to control dust in excavation areas and covering temporary stockpiles when weather conditions require.

5. Coir rolls or straw wattles that do not contain plastic or synthetic monofilament netting shall be installed along or at the base of slopes during construction to capture sediment.

6. Construction activities shall limit all construction lighting to within the area of work and use directional lighting, shielding, and other measures as needed to avoid light trespass in residential areas.

7. Should any human remains be discovered during site preparation, excavation, or other ground disturbance associated with the proposed project, all ground disturbing work shall cease, and the County Coroner shall be immediately notified, pursuant to Section 7050.5 of the State of California Health and Safety Code. Work must stop until the County Coroner can determine the origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98. If the County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.

Lighting Districts

8. The Montara and Granada Lighting Districts have lighting facilities along State Route1. Care must be taken to protect the existing light poles and any wiring associated with them during construction. Any damage to the Lighting District facilities during construction shall be repaired by Caltrans per the Lighting District standard details and at Caltrans' expense. The Lighting Districts must be notified of any damage to their lighting facilities and any repairs must be inspected by Lighting District representatives.

Caltrans Avoidance and Minimization Measures

9. **Riparian Vegetation Protection**. All riparian habitat in the Project area will be delineated as an environmentally sensitive area (ESA), and no construction activities will occur outside of the immediate work area in riparian habitat environmentally sensitive areas. At the roadway crossings of Denniston, Frenchman's, and Pilarcitos Creeks, the California Department of Transportation (Caltrans) will limit riparian vegetation removal to the immediate work area. Trees or shrub trimming at those locations will be limited to removing only branches that overhang the roadway.

10. **Seasonal Avoidance**. Construction activities of paved surfaces in areas of potential California red-legged frog habitat (ESAs) will be performed between June 15 and October 15 to minimize impacts on this species. Designated staging areas may be used outside of this work window once cleared by a USFWS-approved biologist or their designee and fenced, as appropriate.

11. **Proper Use of Erosion Control Devices**. To avoid entanglement or injury of California red-legged frog or San Francisco garter snake, erosion control materials that use plastic or synthetic monofilament netting will not be used.

12. **Avoidance of Entrapment**. To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 1-foot deep will be covered at the close of each working day with plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks at an angle no greater than 30 degrees. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. All replacement pipes, hoses, culverts, or similar structures less than 12 inches in diameter will be closed, capped, or covered upon entry to the Project site. All similar structures greater than 12 inches must be inspected before they are subsequently moved, capped, and/or buried.

13. **Biological Monitor**. The names and qualifications of proposed biological monitor(s) will be submitted to the USFWS for approval prior to the start of construction. The USFWS-approved biological monitor(s) will keep a copy of the USFWS biological opinion in their possession when on site. Through

communication with the resident engineer, the USFWS approved biological monitor(s) will be on site during all work that could reasonably result in take of California red-legged frog or other special-status species. The USFWS-approved biological monitor(s) will have the authority to stop work that may result in the unauthorized take of special-status species. If the USFWS-approved biological monitor exercises this authority, the USFWS will be notified by telephone and e-mail message within one working day.

14. **Pre-Construction/Daily Surveys**. Pre-construction surveys for special-status species will be conducted by the USFWS-approved biological monitor no more than 14 calendar days prior to any initial ground disturbance and immediately prior to ground-disturbing activities (including vegetation removal and fence installation) in the Project footprint. These efforts will consist of walking surveys of the Project limits and, if possible, accessible adjacent areas within at least 50 feet of the Project limits. The USFWS-approved biological monitor will investigate potential cover sites when it is feasible and safe to do so. This includes thorough investigation of mammal burrows, rocky outcrops, appropriately sized soil cracks, tree cavities, and debris. Native vertebrates found in the cover sites within the Project limits will be documented and relocated to an adequate cover site in the vicinity, with the exception of fully protected species. Safety permitting, the USFWS-approved biological monitor will also survey areas of disturbed soil for signs of California red-legged frog or San Francisco garter snake within 30 minutes following initial disturbance of the given area. The need for further pre-construction surveys will be determined by the biologist based on site conditions and realized construction timelines.

15. **Protocol for Species Observation.** The USFWS-approved biological monitor(s) will have the authority to halt work through coordination with the resident engineer if California red-legged frog or San Francisco garter snake are observed in the Project footprint. The resident engineer will keep construction activities suspended in a 50-foot radius of the California red-legged frog or San Francisco garter snake in any construction area where the biologist has determined that a potential take of the species could occur. Work will resume after observed listed individuals leave the site voluntarily, the biologist determines that no wildlife is being harassed or harmed by construction activities, or the wildlife is relocated by the biologist to a release site using USFWS-approved handling techniques.

16. **Handling of California Red-Legged Frog**. If a California red-legged frog is discovered, the resident engineer and USFWS-approved biological monitor will be immediately informed.

    a. If a California red-legged frog gains access to a construction zone, work will be halted immediately within 50 feet until the animal leaves the site or is captured and relocated by the USFWS-approved biological monitor.

b. The USFWS will be notified within one working day if a California red-legged frog or San Francisco garter snake is discovered in the construction site.

c. The captured California red-legged frog will be released in appropriate habitat outside of the construction area but near the capture location. The release habitat will be determined by the USFWS-approved biological monitor.

d. The USFWS-approved biological monitor will take precautions to prevent introduction of amphibian diseases in accordance with the Revised Guidance on Site Assessments and Field Surveys for the California red-legged frog (USFWS 2005).

17. **Rare Plant Survey**. Caltrans will conduct a rare plant survey in the Biological Study Area (BSA) to determine the presence or absence of special-status plant species. To ensure that surveys are conducted at an appropriate time to identify all the target species, as many as three survey replicates will be performed. The survey replicates will be timed based on target species blooming periods and rainfall levels. All plants will be identified to a level needed to verify protected status. Any listed plants discovered in the field will be mapped and included as ESAs in the final plans and specifications. Caltrans will consult with the appropriate wildlife agency with jurisdiction and will obtain necessary permits or authorizations if unavoidable take of a listed plant species incidental to the proposed work would occur.

18. **Pre-Construction Plant Survey**. A Project biologist with appropriate botany experience will perform a site survey in ESAs where construction disturbance could occur before start of work. Special-status plants will be flagged and avoided where possible. Caltrans will coordinate with appropriate wildlife agencies with jurisdiction prior to construction if incidental take of a listed plant species is unavoidable and will obtain any necessary permits or authorizations for direct impacts. Caltrans will adhere to the requirements of all permits and authorizations issued for the Project.

19. **Drainage Work Exclusion for Ornduff's Meadowfoam**. Caltrans will avoid drainage system rehabilitation or other work in unpaved areas that could affect soil hydrology within 3,000 feet of where Ornduff's meadowfoam is known to occur. If Caltrans later determines that rehabilitating the drainage system at this location is necessary, it will complete a soil hydrology study, drainage system design, and mitigation plan in coordination with the California Department of Fish and Wildlife that result in no net loss of this species or its habitat.

20. **Wetlands and Waters Construction Work Windows**. Work in wetlands, waters, and riparian habitat will be limited to June 15 through October 15 to avoid or minimize impacts to waters of the United States, waters of the state, riparian habitat, and special-status species habitat.

21. **ESAs**. Wetlands, waters, riparian habitat, designated critical habitat, and special-status species habitat—including that of Ornduff's meadowfoam—will be delineated as ESAs on contract plans and defined in contract specifications. Environmentally sensitive areas outside of the proposed work areas will be specifically identified to avoid during construction. Where work must occur in or adjacent to an ESA, an approved biologist with stop-work authority will be present.

22. **ESA Fencing**. Caltrans will install fencing to outline and protect ESAs prior to the start of construction. Environmentally sensitive area provisions will be implemented as a first order of work and will remain in place until all construction activities are completed in the work area.

23. **ESA Action Plan.**

    a. An ESA Action Plan will be developed for the Project to protect the two archaeological resources in the APE in their entirety. Before construction, the ESA Action Plan will be reviewed and approved by the Cultural Studies Office (CSO) at Caltrans' headquarters. The Caltrans archaeologist will ensure that the ESAs are included and described clearly in the environmental document. The ESAs will be included in the Project's Environmental Commitment Record.

    b. The Caltrans archaeologist will work in coordination with the other responsible parties to ensure that the ESA is represented and depicted in the plans, specifications, and estimates package. The package and plans will be reviewed throughout the design process, so that the ESAs are accurately represented and depicted. The Caltrans archaeologist will ensure that the ESA Action Plan is included in the resident engineer's pending file.

    c. All responsible parties will ensure that the ESAs are discussed during the preconstruction meeting, led by a qualified archaeologist and Native American tribes who may want to administer the training as well. The importance of the ESAs will be discussed with construction personnel, stressing that no construction activity (including storage of equipment or materials) may occur in the ESAs, and that workers must remain outside of the ESAs at all times. In addition, historic preservation laws that protect archaeological sites and artifacts against any disturbance or removal will be discussed.

    d. The resident engineer will notify the Caltrans Office of Cultural Resource Studies staff (Caltrans project archaeologist) at least 2 weeks in advance of the start of construction. A field review of the ESA locations will be conducted. The Caltrans project archaeologist will mark the ESA locations with the contractor.

24. **Construction Activities for ESA Protection.**

    a. Temporary, high-visibility fencing will be installed by the contractor at least 1 week before beginning any ground disturbance. The Caltrans archaeologist will coordinate this activity with the resident engineer. The Caltrans archaeologist will be present to supervise and monitor this activity.

    b. The Caltrans archaeologist will conduct spot inspections and site visits to ensure the integrity of the environmentally sensitive areas. The Caltrans archaeologist will notify the State Historic Preservation Officer, CSO, and consulting Native American parties within 48 hours of any ESA, post-review discovery, or inadvertent effect, to immediately determine how the breach or discovery will be addressed.

25. **Post-Construction Activities**. The resident engineer will inform the Caltrans archaeologist when construction is completed. The contractor, in coordination with the resident engineer and the Caltrans archaeologist, will remove the ESA fencing at the completion of construction.

26. **Guard Rail Finish**. Caltrans will include a matte finish on guard rail exposed metal surfaces to reduce glare.

27. **Development of Transportation Management Plan**. Caltrans will develop a Project-specific traffic management plan (TMP) during the final design phase of the Project. The TMP will be prepared in accordance with Caltrans requirements and guidelines to minimize construction related delays and impacts on emergency vehicles and the traveling public. The TMP will include the following provisions:

    a. Coordination with San Mateo County, the City of Half Moon Bay, and any other applicable local jurisdictions for notification of closures and detours.

    b. Coordination with California Highway Patrol (CHP) and other local law enforcement.

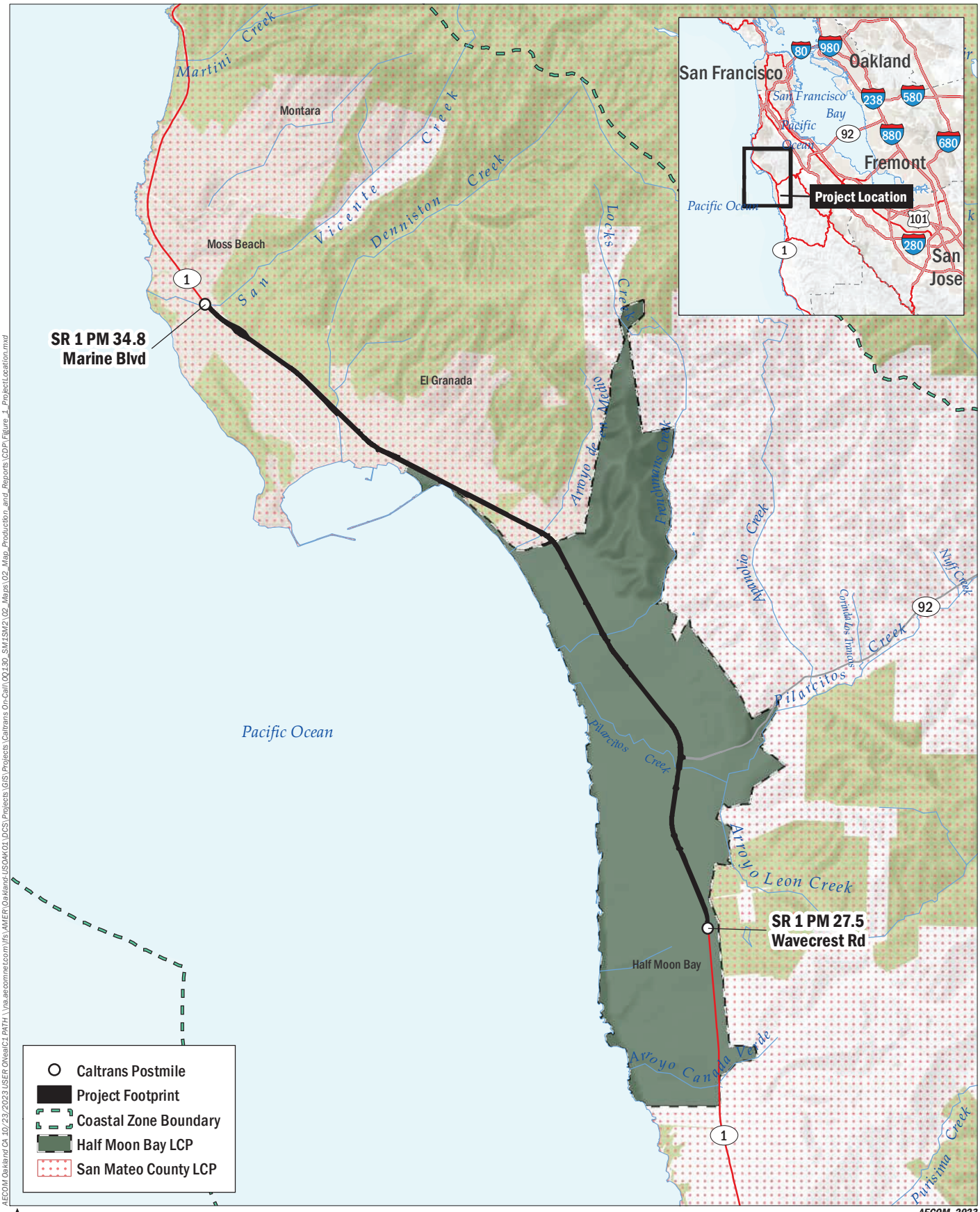
    c. Use of portable changeable message signs, the CHP construction zone enhanced enforcement program, one way traffic controls, and flaggers.

    d. Continued access for emergency services.

    e. Continued access to any residential driveways.

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT B



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Caltrans District 4

State Route 1 Multi-Asset Roadway Rehabilitation Project
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PM 27.5/34.8
EA 04-0Q130 / Project ID 0418000053

FIGURE 1

Project Vicinity

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT C

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Caltrans District 4

State Route 1 Multi-Asset Roadway Rehabilitation Project
San Mateo County, CA
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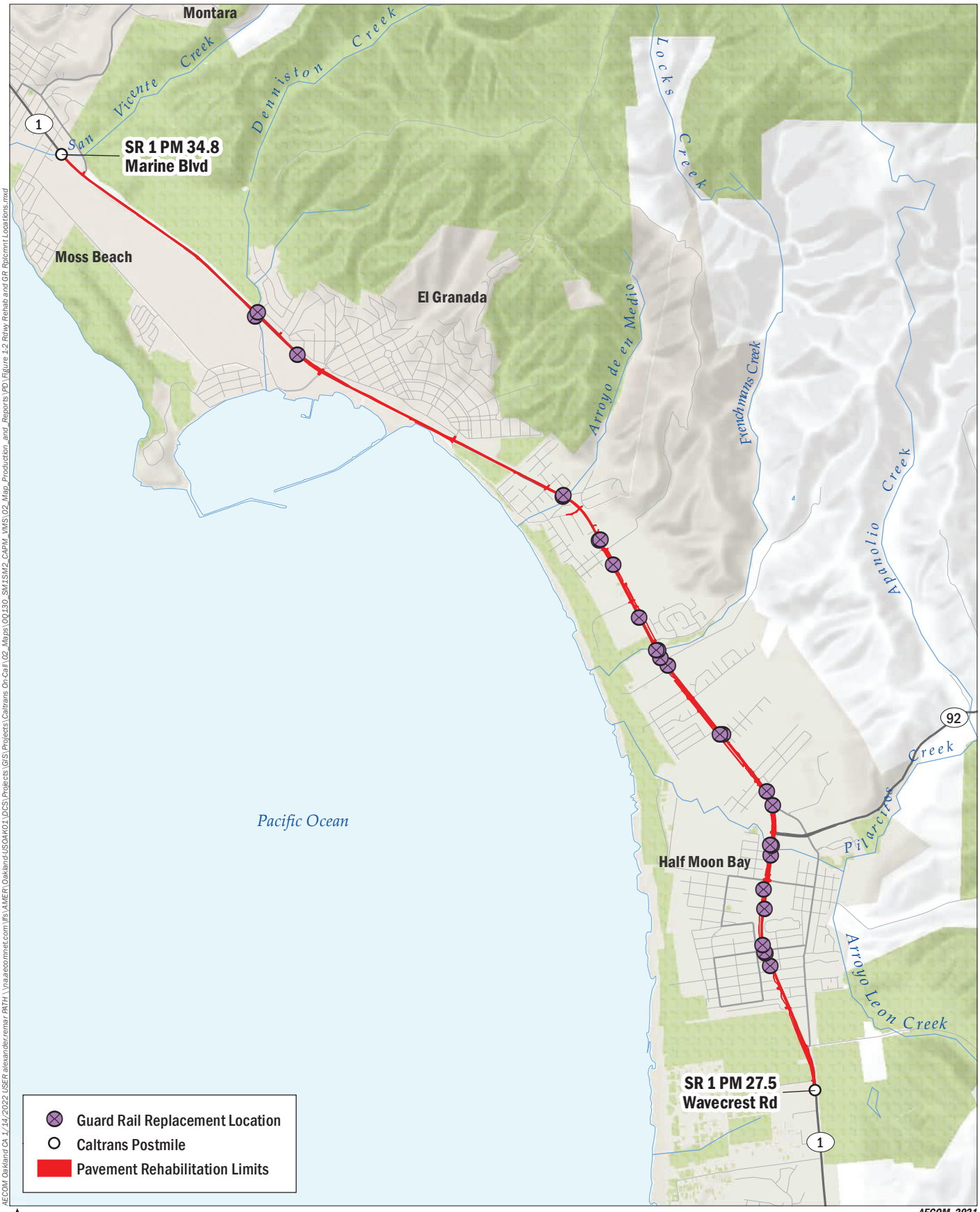
EA 04-0Q130 / Project ID 0418000053

FIGURE 1-1

Project Vicinity



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Caltrans District 4

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FIGURE 1-2

Roadway Rehabilitation and Guard Rail Replacement Locations

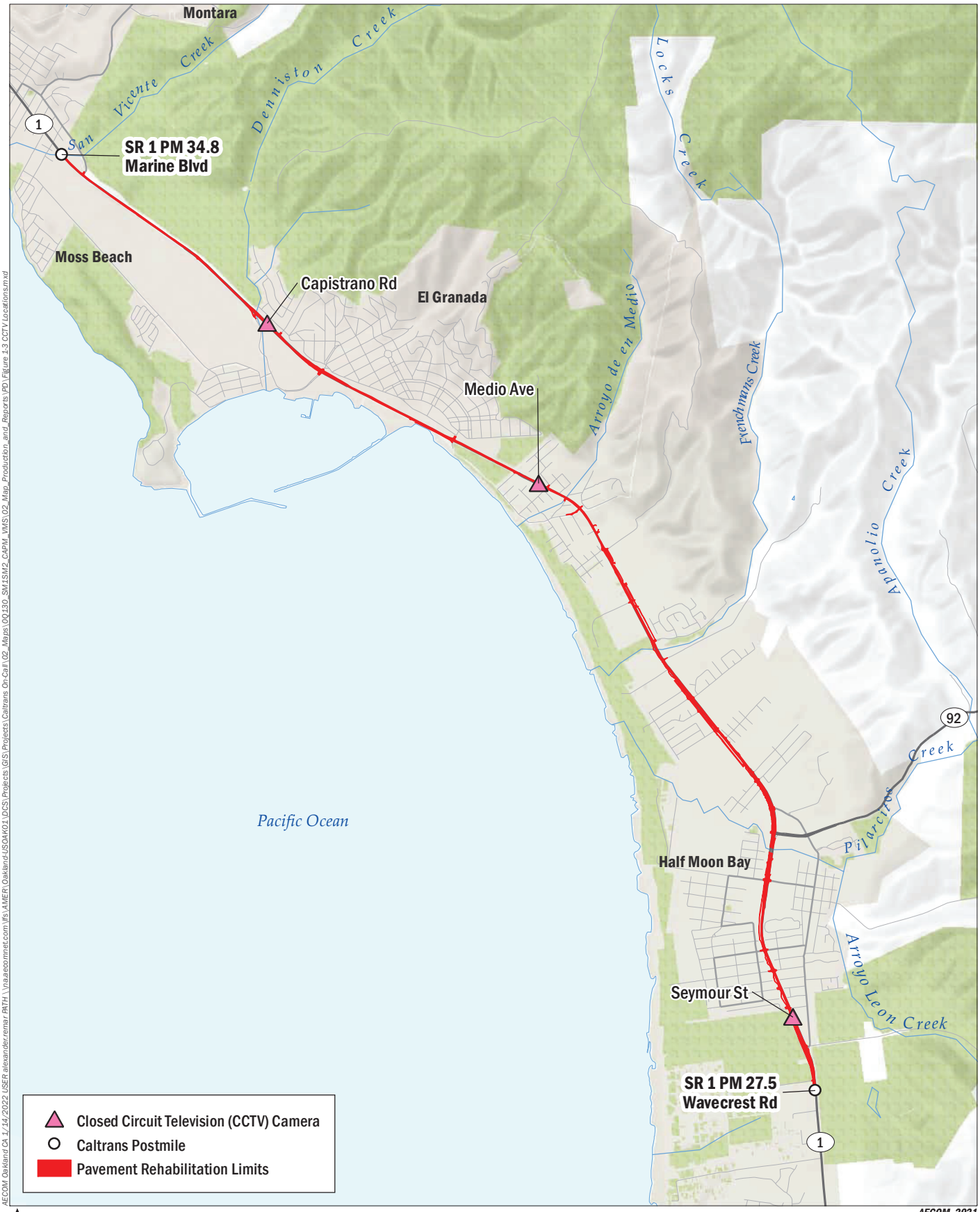

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FIGURE 1-3

Closed Caption Television Camera Locations

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FIGURE 1-4

Fixed Intersection Camera Locations

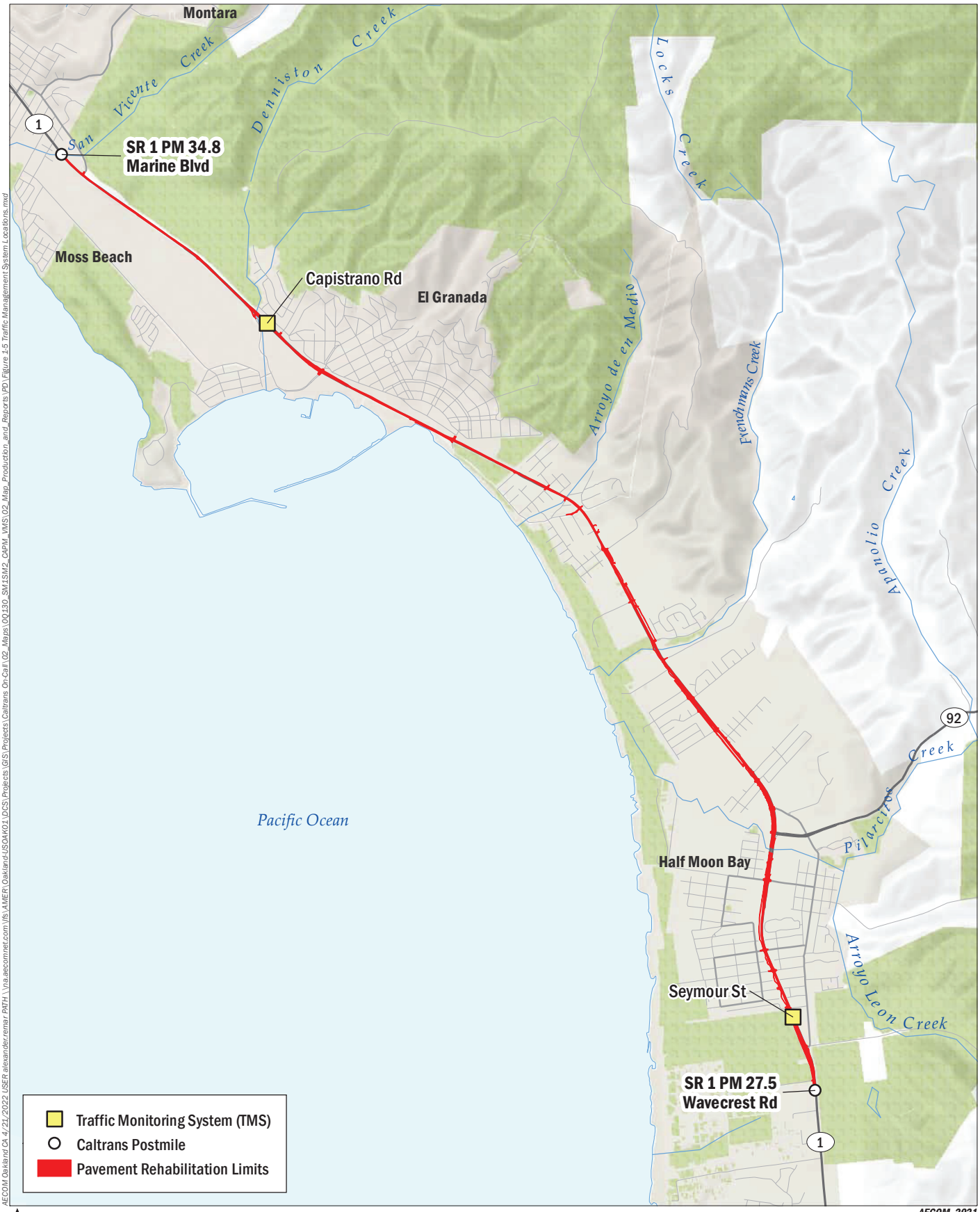

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FIGURE 1-5

Traffic Management System Locations

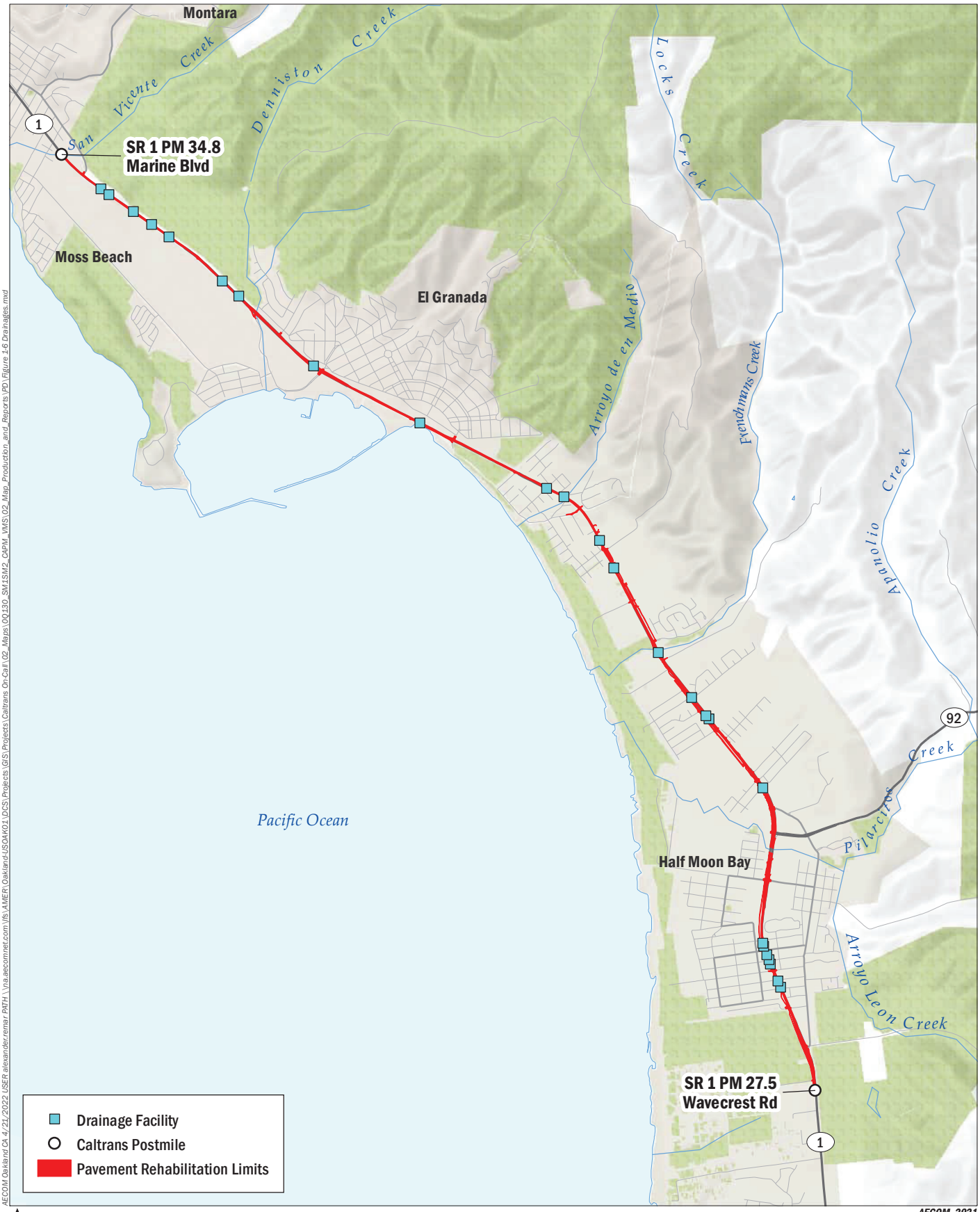

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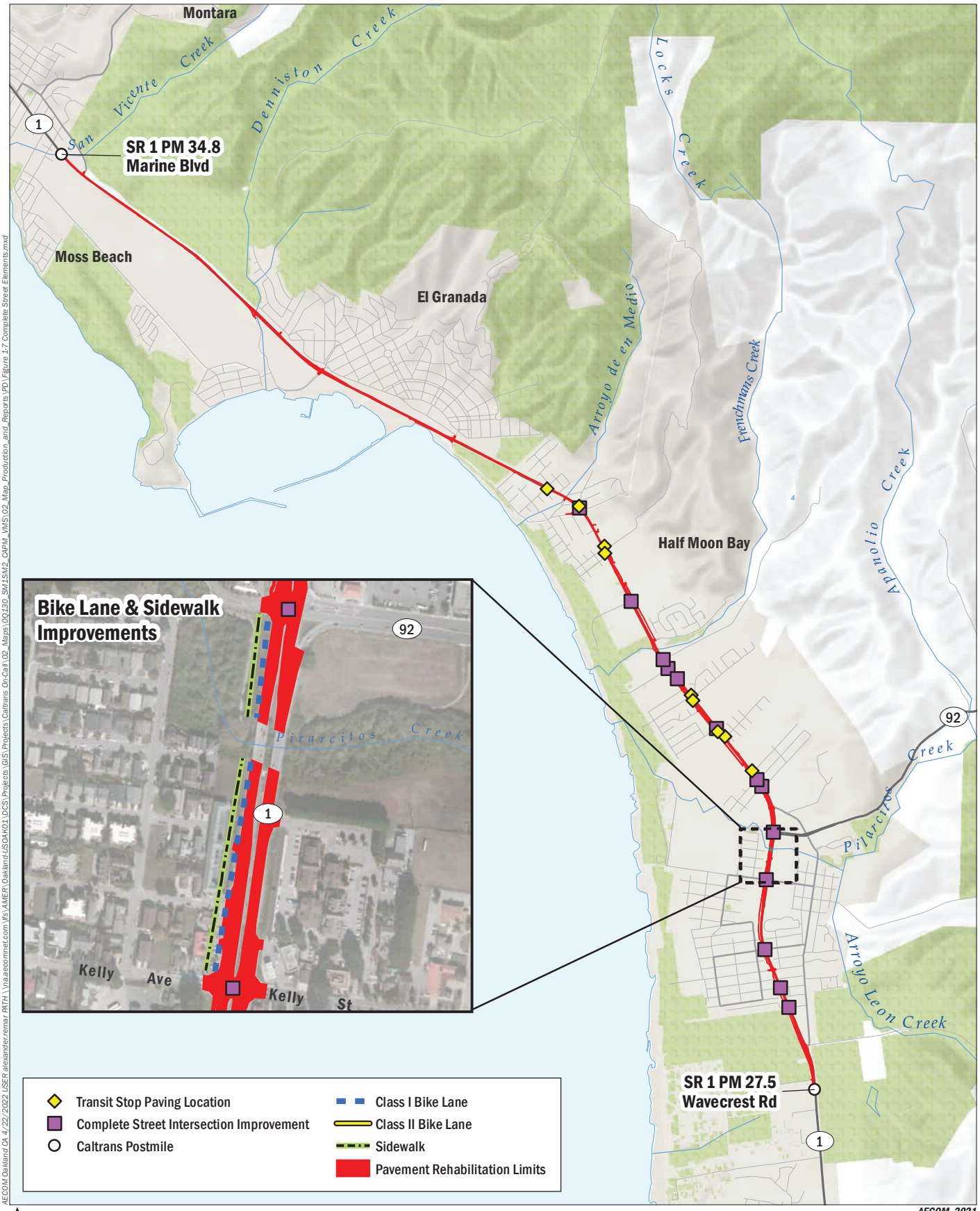
FIGURE 1-6

Drainage System Improvement Locations



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Caltrans District 4

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FIGURE 1-7

Bicycle, Pedestrian and Complete Street Improvement Locations

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

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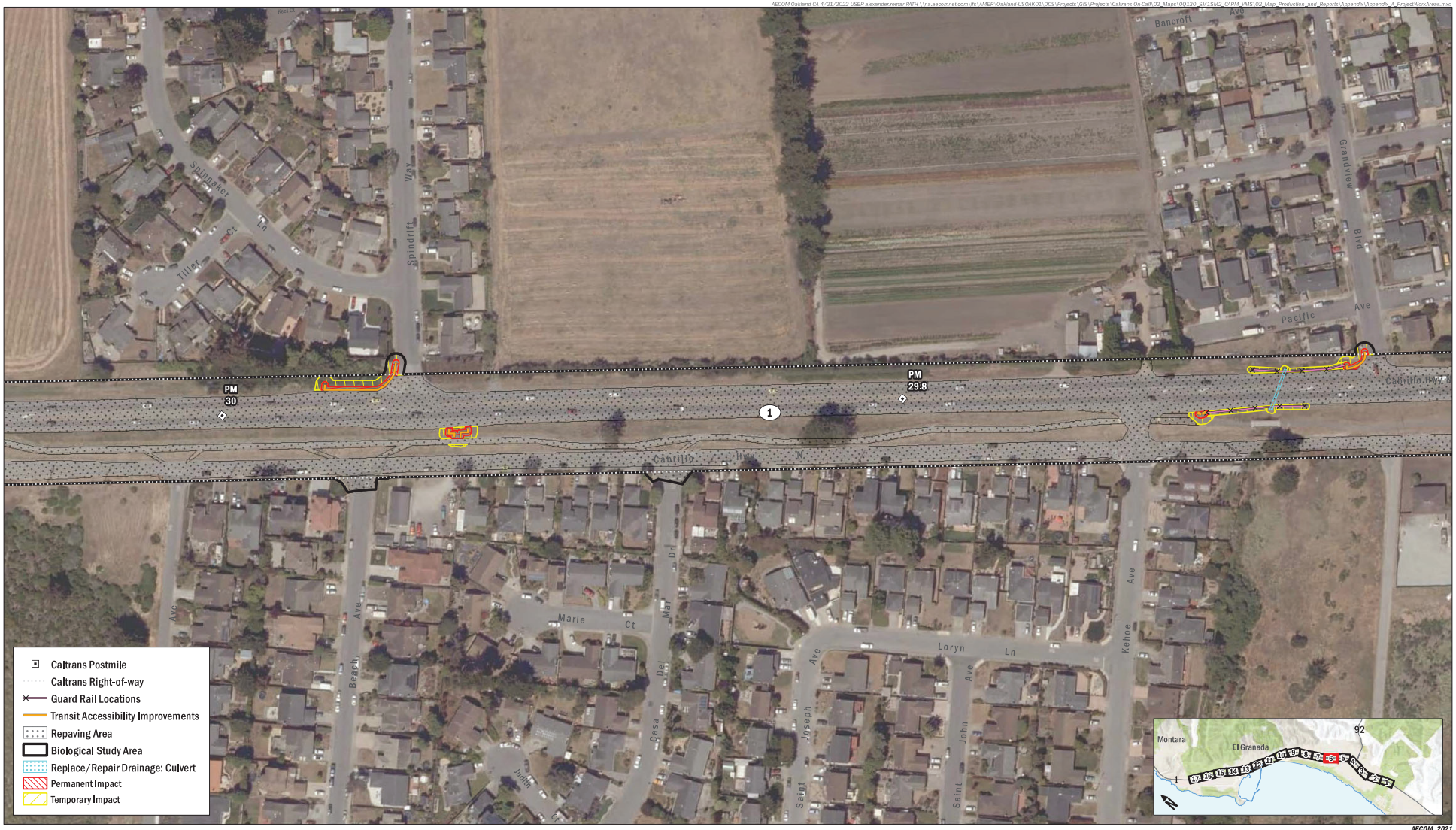

AECOM, 2021
Caltrans, 2021
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Bordeaux Ln
Touraine Pl
Avignon Pl
Le Ruisseau
Francais Ave
Frenchmans Creek Rd
Cabrillo Hwy
PM 30.4
PM 30.2
1
Caltrans Postmile
Caltrans Right-of-way
Guard Rail Locations
Repaving Area
Biological Study Area
Temporary Impact
0
150
Feet
Montara
El Granada
92
AECOM, 2021
Caltrans, 2021
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Caltrans, 2021
San Mateo County Imagery, 2018

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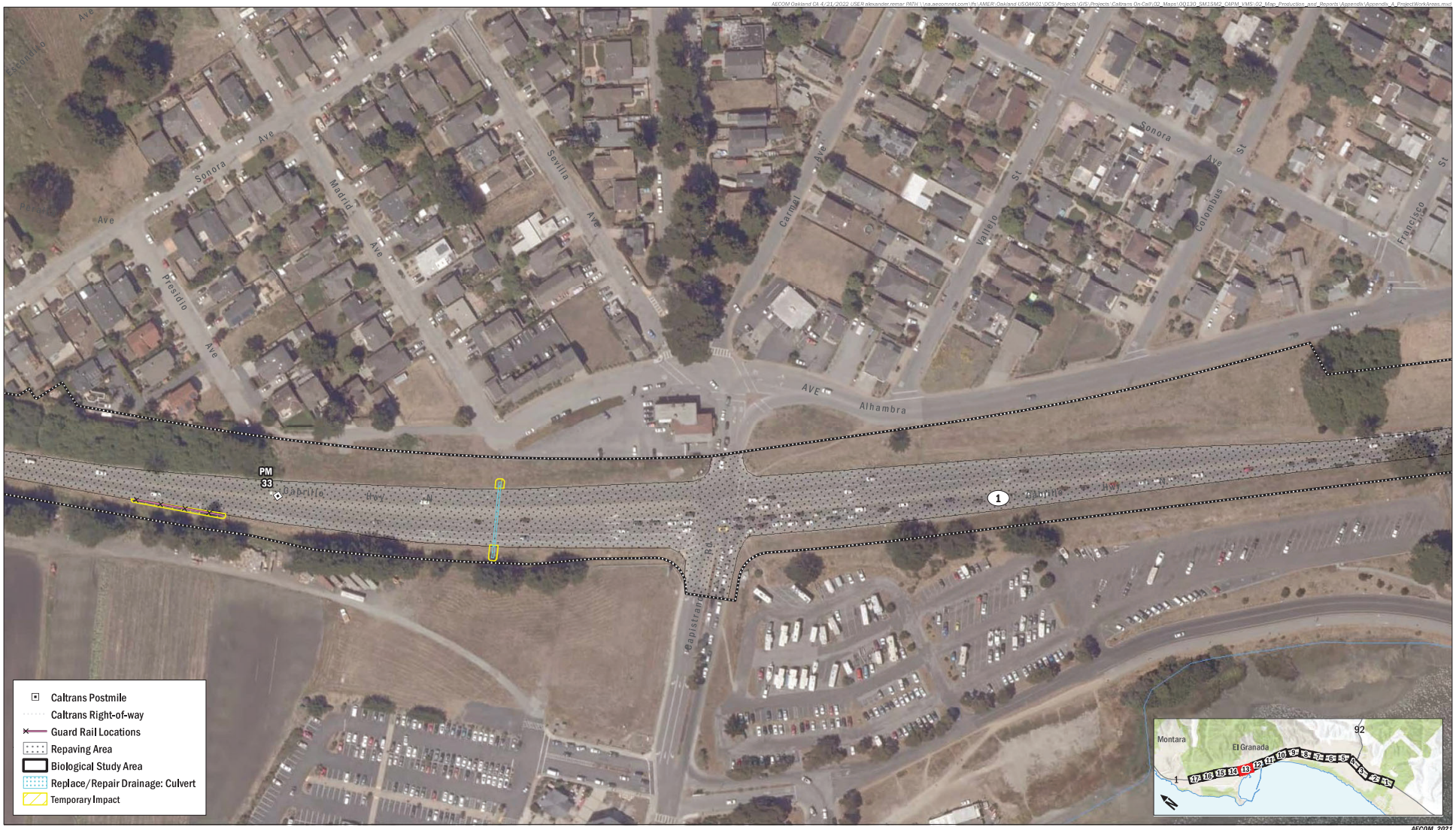

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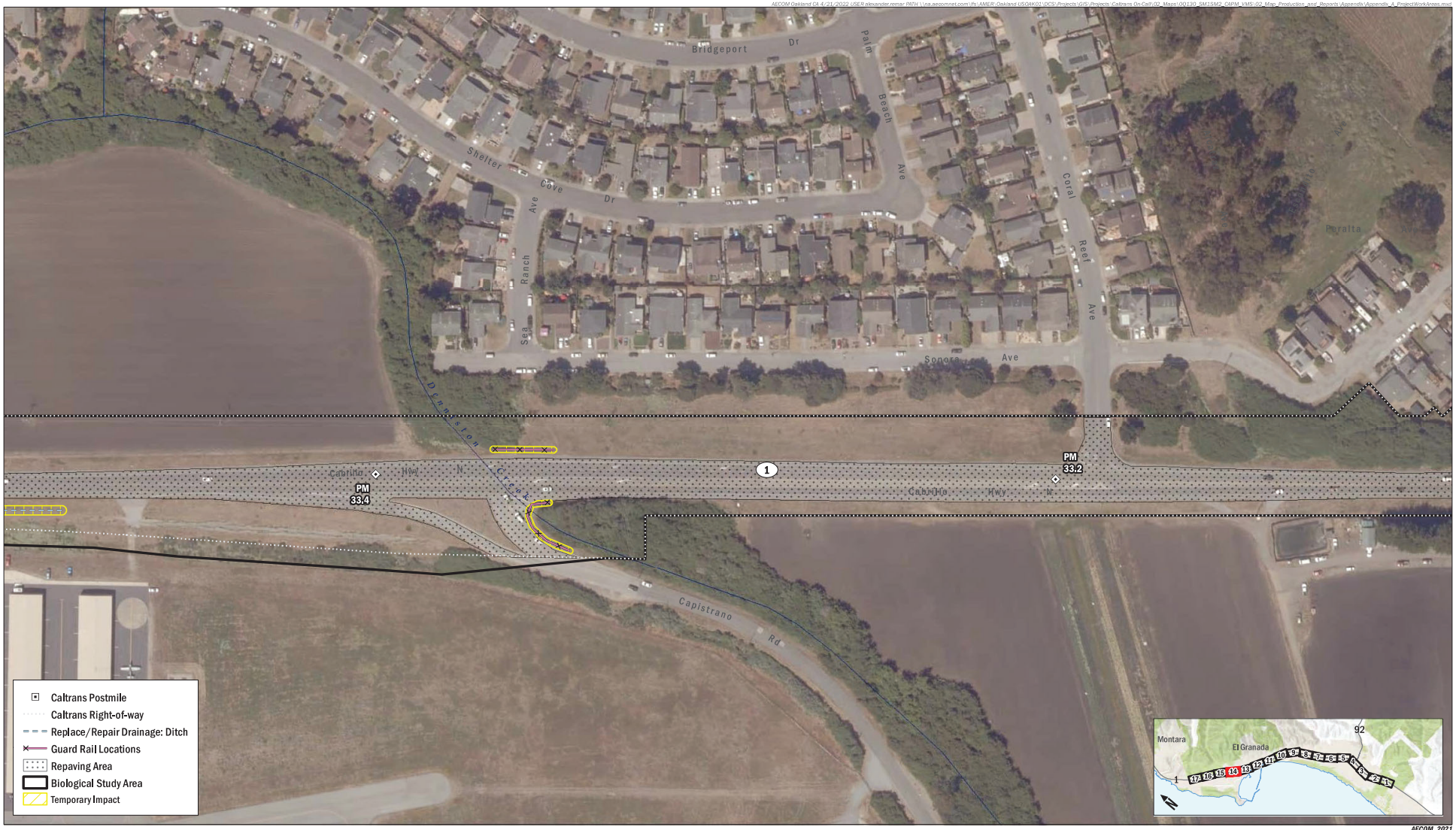

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Caltrans, 2021
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APPROVED AS TO IMPACT ON STATE FACILITIES AND CONFORMANCE WITH APPLICABLE STATE STANDARDS AND PRACTICES AND THAT TECHNICAL OVERSIGHT WAS PERFORMED.

CONSULTANT DESIGN MANAGER	CALTRANS DESIGN OVERSIGHT APPROVAL	REGISTRATION No.	LICENSE Exp DATE	DATE SIGNED
SANG KIM	FITSUM WORREDE			

INDEX OF PLANS

SHEET No.	DESCRIPTION
	TITLE SHEET AND LOCATION MAP
	TYPICAL CROSS SECTIONS
	KEY MAP AND LINE INDEX
	PROJECT CONTROL
	LAYOUT
	CONSTRUCTION DETAILS
	TEMPORARY WATER POLLUTION CONTROL PLANS AND QUANTITIES
	DRAINAGE PLANS, PROFILES, DETAILS, AND QUANTITIES
	UTILITY PLANS
	CONSTRUCTION AREA SIGNS
	STAGE CONSTRUCTION AND TRAFFIC HANDLING PLANS, DETAILS, AND QUANTITIES
	PAVEMENT DELINEATION PLANS, DETAILS, AND QUANTITIES
	SIGN PLANS, DETAILS, AND QUANTITIES
	SUMMARY OF QUANTITIES
	EROSION CONTROL PLANS, DETAILS, AND QUANTITIES
	ELECTRICAL PLANS, DETAILS, AND QUANTITIES

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

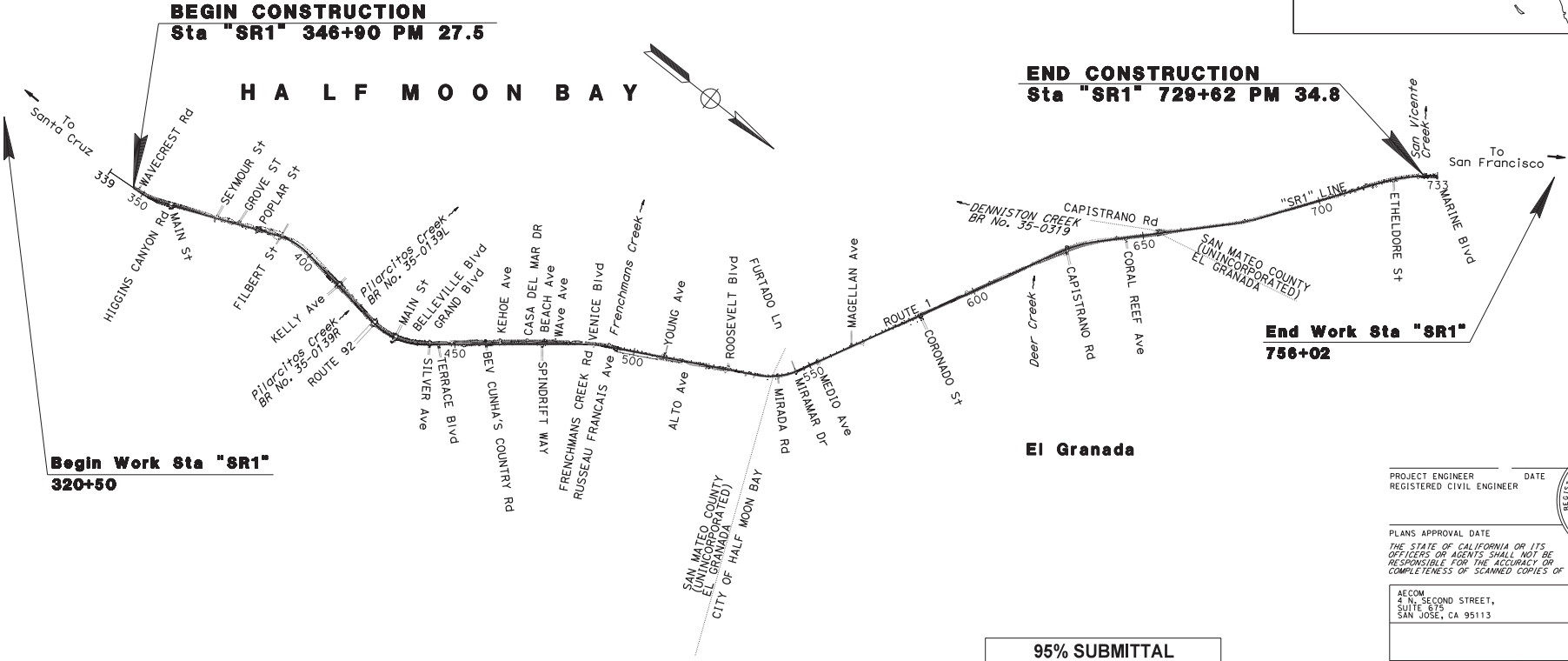
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY

IN SAN MATEO COUNTY
IN AND NEAR HALF MOON BAY
FROM WAVECREST ROAD
TO 0.1 MILE SOUTH OF MARINE BOULEVARD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2023

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

LOCATION MAP



THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

95% SUBMITTAL
NOT FOR CONSTRUCTION
NOVEMBER 3, 2023

PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

PLANS APPROVAL DATE

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

AECOM
4 N. SECOND STREET,
SUITE 675
SAN JOSE, CA 95113

CONTRACT No.	04-0Q1304
PROJECT ID	0418000053

LAST REVISION 10-27-23
DATE PLOTTED => 06-NOV-2023
TIME PLOTTED => 16:14

BORDER LAST REVISED 8/1/2016 | CALTRANS WEB SITE IS: HTTP//WWW.DOT.CA.GOV/ | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => ernie.garnica | DGN FILE => 0418000053ab001.dgn | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp. 06-30-24 — CIVIL — STATE OF CALIFORNIA

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

AECOM
4 N. SECOND STREET,
SUITE 675
SAN JOSE, CA 95113-2254

CALTRANS
111 GRAND AVENUE
OAKLAND, CA 94612

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. EXACT LOCATIONS AND TYPES OF DIKE AND CURB ARE SHOWN ON THE LAYOUTS AND IN THE SUMMARY OF QUANTITIES SHEETS.

ROUTE 1
DESIGN DESIGNATION

ADT (2021)	29,600	D	51.2%
ADT (2026)	31,100	T	5.01%
ADT (2046)	35,600	V	60 mph
DHV_{2046}	2,800		
$ESAL_{20}$	4,409,000	TI_{20}	10.50
$ESAL_{40}$	9,445,000	TI_{40}	12.00

PAVEMENT CLIMATE REGION

MEDITERRANEAN

ABBREVIATIONS:

BOW BACK OF SIDEWALK
RHMA (TYPE G) RUBBERIZED HOT MIX ASPHALT (GAP GRADED)
RHMA (TYPE O) RUBBERIZED HOT MIX ASPHALT - OPEN GRADED (OPEN GRADED FRICTION COURSE)

EXISTING PAVEMENT STRUCTURE SECTIONS:

(A) TRAVEL LANES AND SHOULDERS
0.7' TO 1.27' HMA
1.0' TO 1.25 IMPORTED BASE MATERIAL

(B) MULTIMODAL TRAIL
0.35' HMA (A)
0.0' TO 0.5' CI 4 AS

(C) CITY N. MAIN PROJECT LIMIT
0.1' RHMA (A)
0.2' RHMA (G)
0.45' HMA (A)
1.95' AB

TYPICAL PAVEMENT STRUCTURE SECTIONS:

[1] OVERLAY
0.35' COLD PLANE AC Pvmt
0.20' RHMA (TYPE G)
GEOSYNTHETIC PAVEMENT INTERLAYER (PAVING GRID)
0.15' HMA (TYPE A)

[2] MULTI-MODAL TRAIL
0.10' COLD PLANE AC
0.10' HMA (TYPE A)

[3] FULL DEPTH STRUCTURAL SECTION (WIDENING)
0.10' RHMA (TYPE O)
0.20' RHMA (TYPE G)
0.45' HMA (TYPE A)
1.95' CI 2 AB WITH SUBGRADE ENHANCEMENT GEOGRID

[4] CURB RAMPS
0.35' MINOR CONCRETE
0.35' CI 2 AB

[5] SIDEWALK
0.35' MINOR CONCRETE
0.35' CI 2 AB

[6] TOP LIFT
0.10' COLD PLANE AC Pvmt
0.10' RHMA (TYPE G)

[7] BUS CONNECTION
0.10' HMA (TYPE A)

[8] PILARCITOS CREEK BRIDGE
0.10' COLD PLANE AC Pvmt
0.10' POLYESTER CONCRETE OVERLAY

TYPICAL CROSS SECTIONS

NO SCALE

X-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	CHECKED BY
KEVIN KRAMER	JASON HOM

CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

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LAST REVISION 10-27-23
DATE PLOTTED => 30-OCT-2023
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BORDER LAST REVISED 7/2/2010

USERNAME => ernie.garnica
DGN FILE => 0418000053ca001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0720

PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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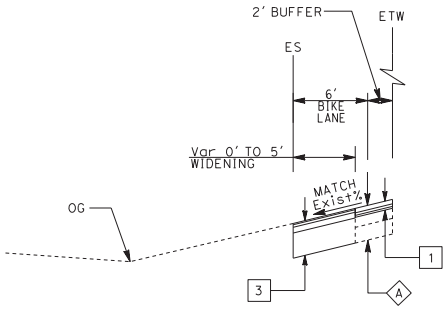
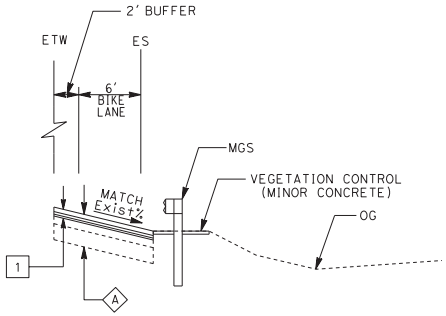
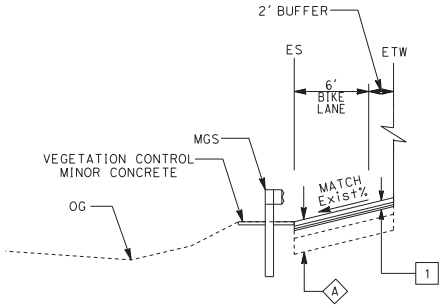


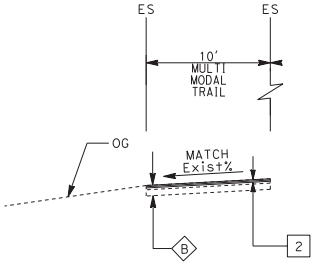
"SR1" 398+54.81 TO 404+77.70



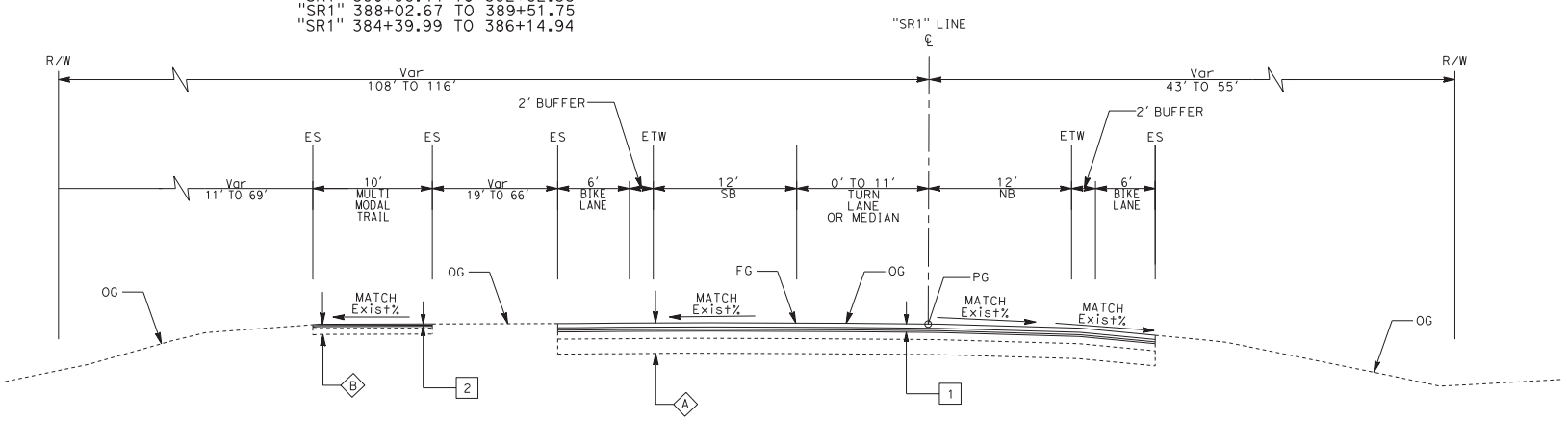
"SR1" 402+28.95 TO 403+78.86



"SR1" 390+96.44 TO 392+62.33
"SR1" 388+02.67 TO 389+51.75
"SR1" 384+39.99 TO 386+14.94



"SR1" 346+91 TO 372+00



"SR1" 372+00 TO 405+63.70

ROUTE 1

TYPICAL CROSS SECTIONS

NO SCALE

X-2

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UNIT 0720
PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

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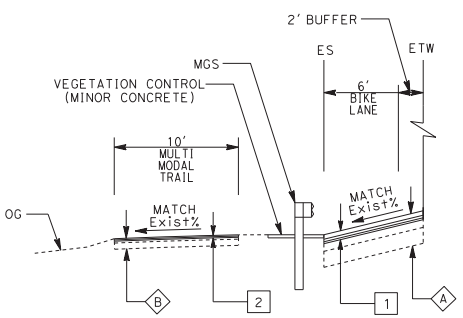
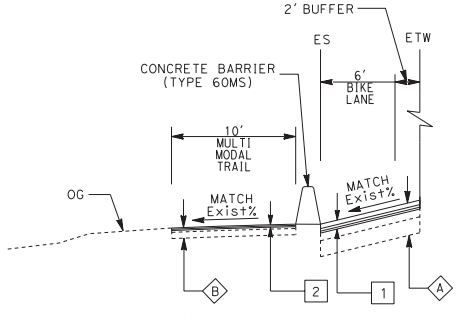
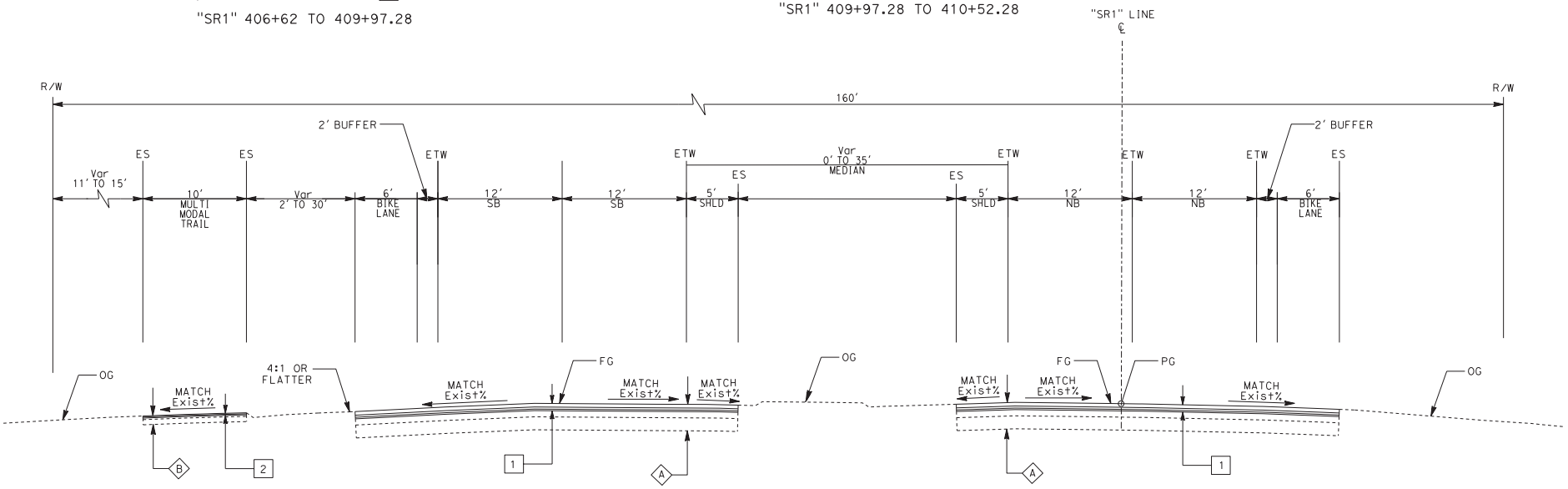


"SR1" 406+62 TO 409+97.28



"SR1" 409+97.28 TO 410+52.28



"SR1" 405+63.70 TO 411+76.88

ROUTE 1

TYPICAL CROSS SECTIONS

NO SCALE

X-3

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CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

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CHECKED BY: JASON HOM

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UNIT 0720

PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

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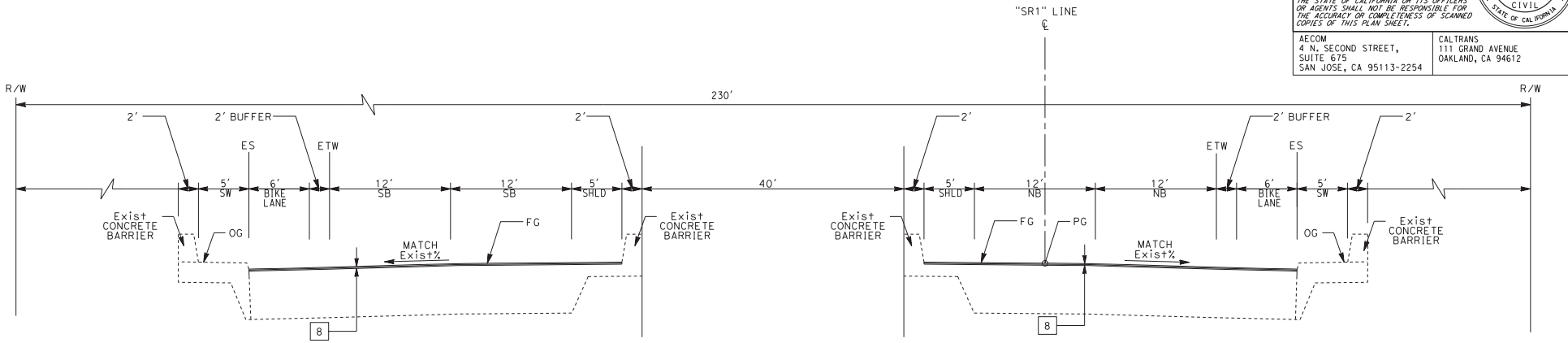
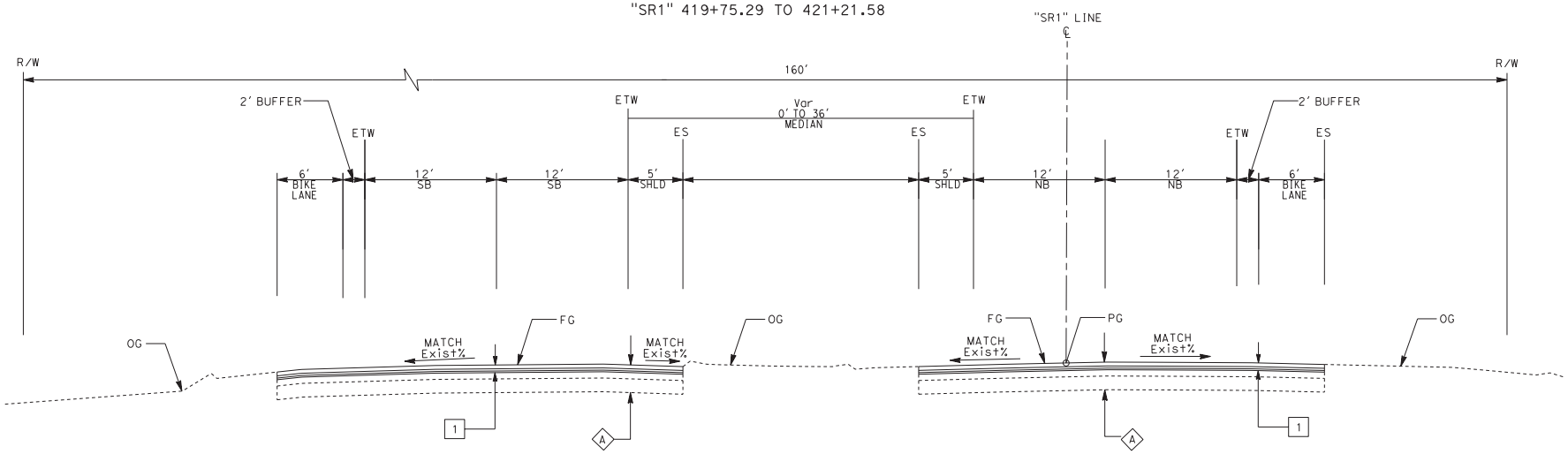


"SR1" 419+75.29 TO 421+21.58



"SR1" 421+21.58 TO 426+36.58
"SR1" 411+76.88 TO 419+75.29

ROUTE 1

TYPICAL CROSS SECTIONS

NO SCALE

X-4

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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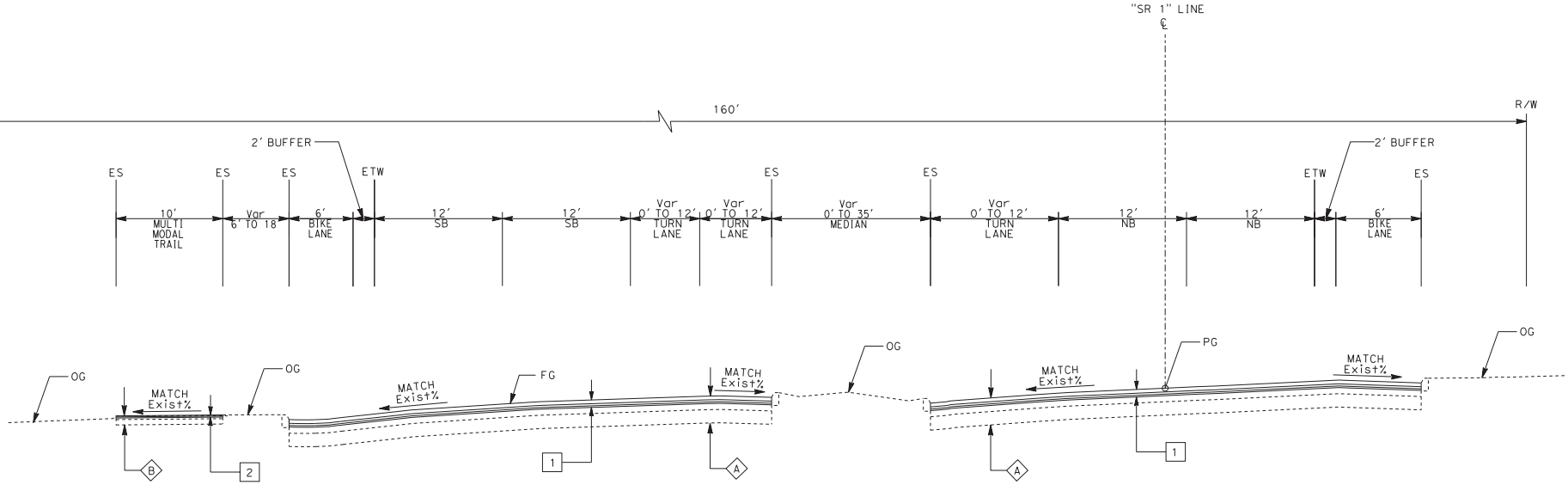

"SR1" 426+36.58 TO 432+79.70

ROUTE 1

TYPICAL CROSS SECTIONS

NO SCALE

X-5

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

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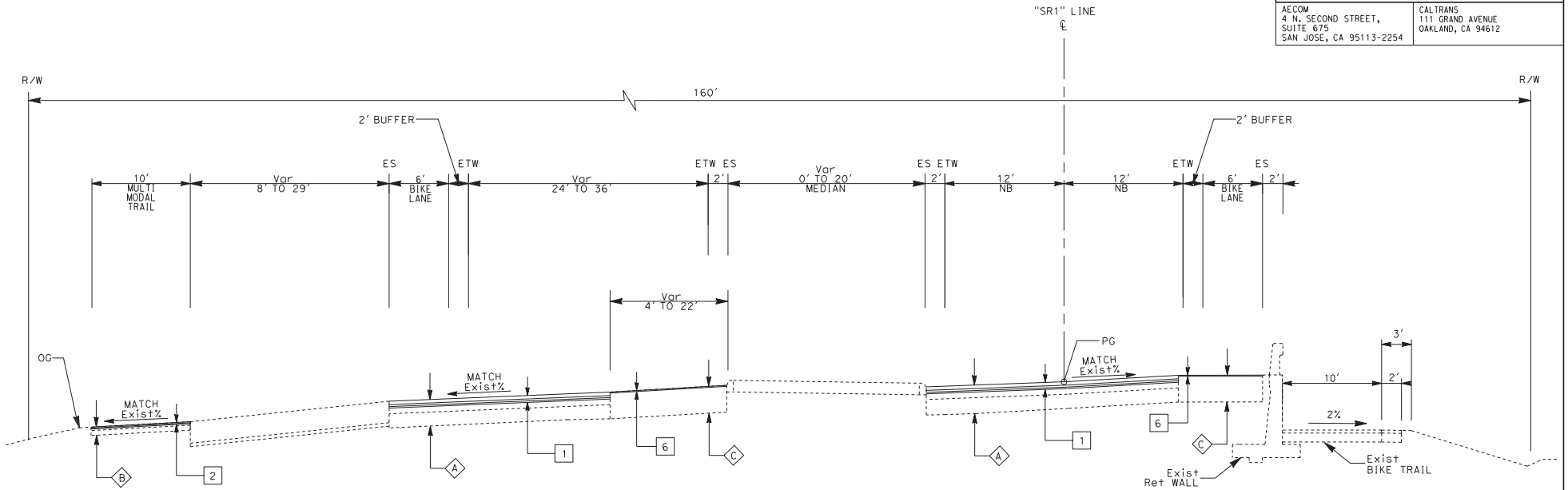

"SR1" 432+79.70 TO 443+37.78

ROUTE 1

TYPICAL CROSS SECTIONS

NO SCALE

X-6

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04	SM	1	27.5/34.8	-	-

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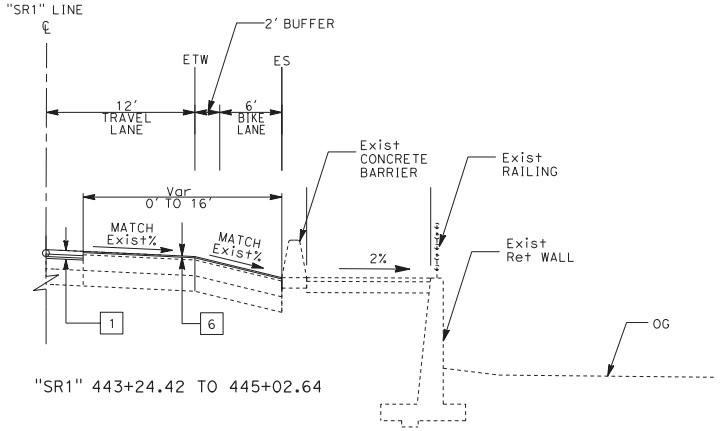
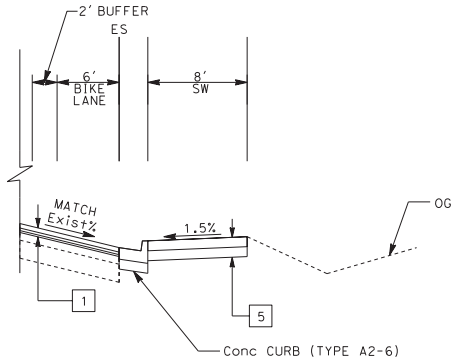
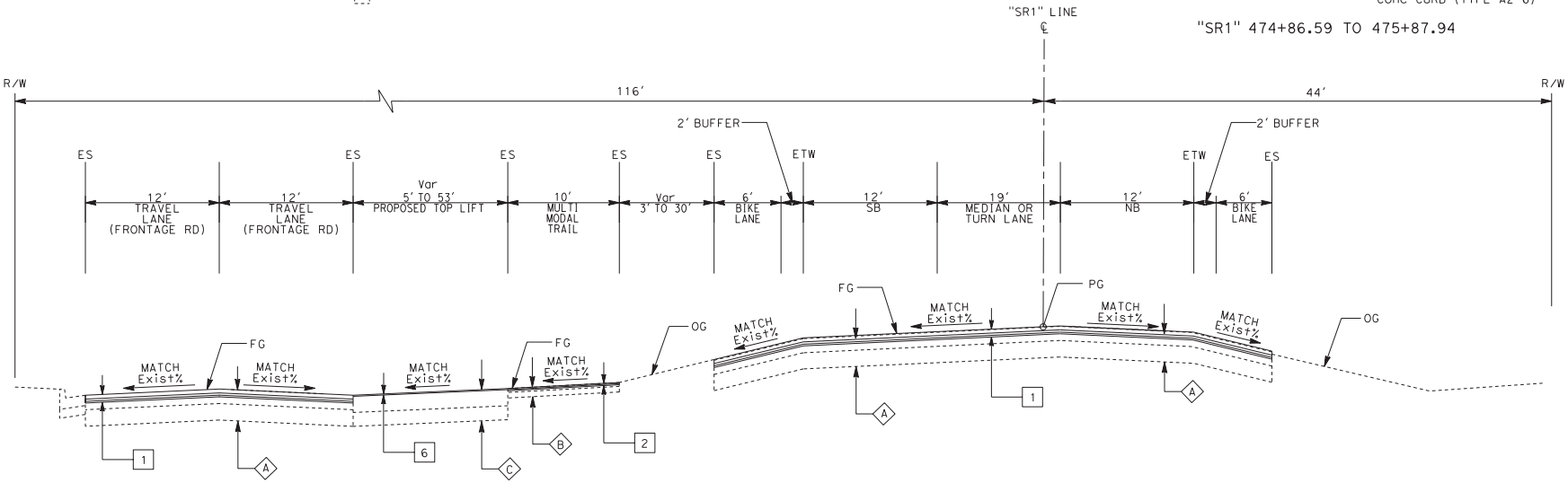


"SR1" 443+24.42 TO 445+02.64



"SR1" 474+86.59 TO 475+87.94



"SR1" 443+37.78 TO 481+73.45

ROUTE 1

TYPICAL CROSS SECTIONS

NO SCALE

X-7

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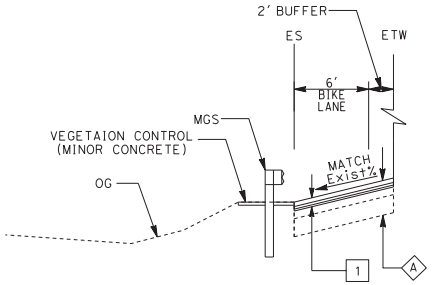
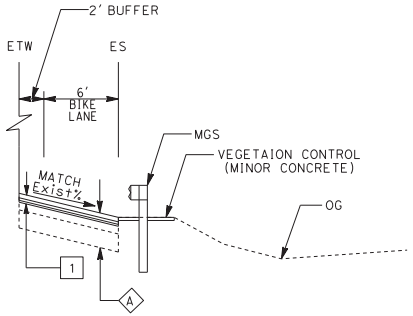
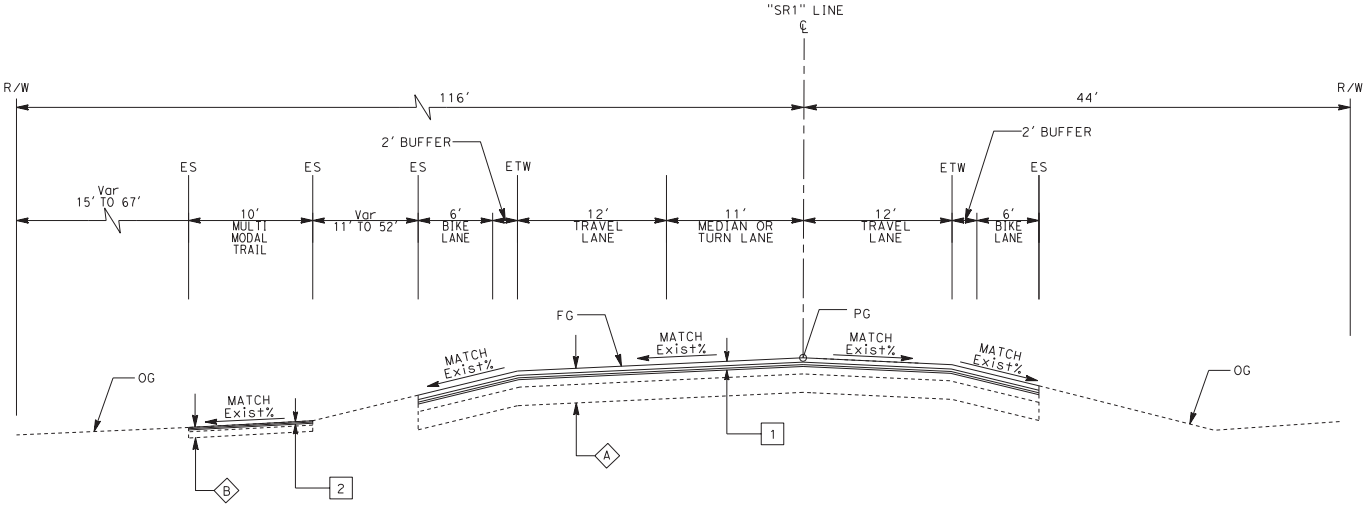


"SR1" 489+05.83 TO 494+96.88



"SR1" 490+68.27 TO 493+12.61
"SR1" 485+62.92 TO 487+14.84



"SR1" 481+73.45 TO 495+27.76

ROUTE 1

TYPICAL CROSS SECTIONS

NO SCALE

X-8

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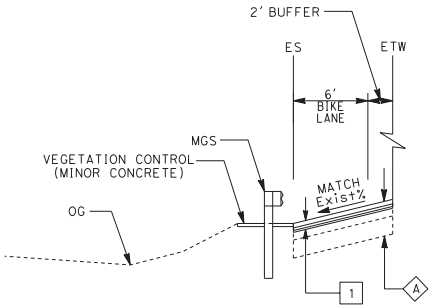
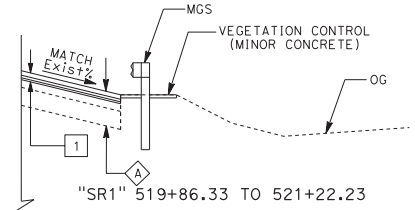
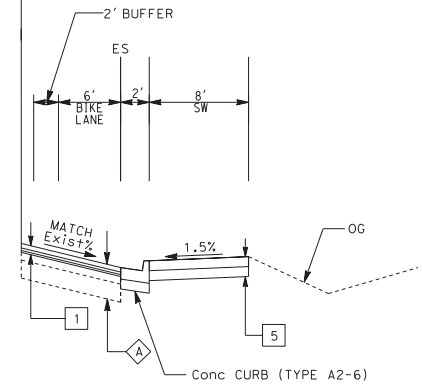


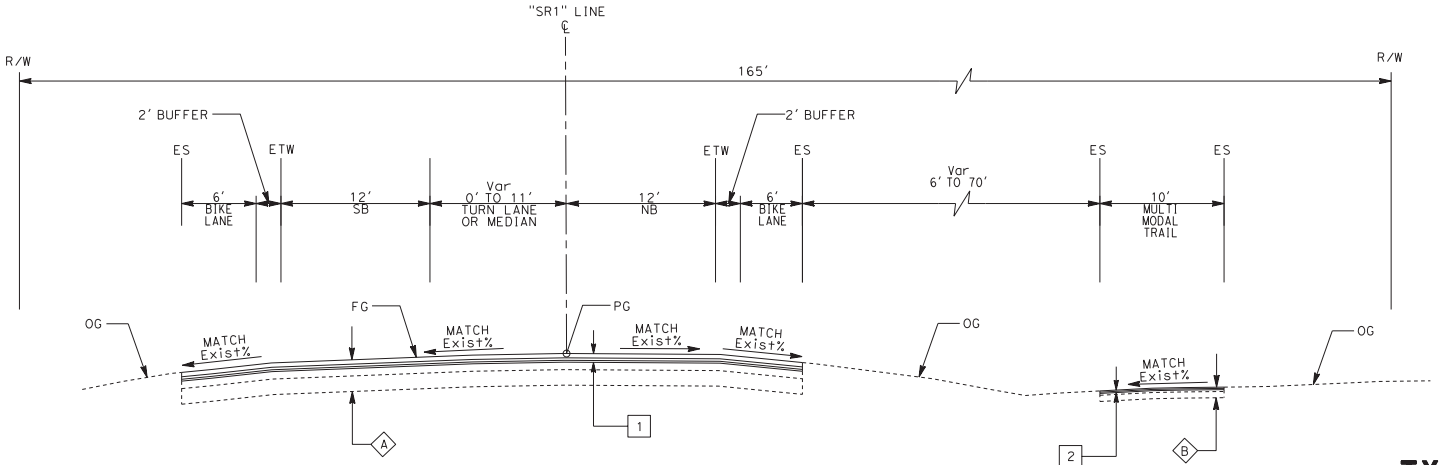
"SR1" 502+49.94 TO 503+98.27



"SR1" 519+86.33 TO 521+22.23



"SR1" 495+48.57 TO 496+32.53



"SR1" 495+27.76 TO 525+55.29

TYPICAL CROSS SECTIONS

NO SCALE

ROUTE 1

X-9

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CHECKED BY: JASON HOM

REVISED BY: .
DATE REVISED: .

LAST REVISION
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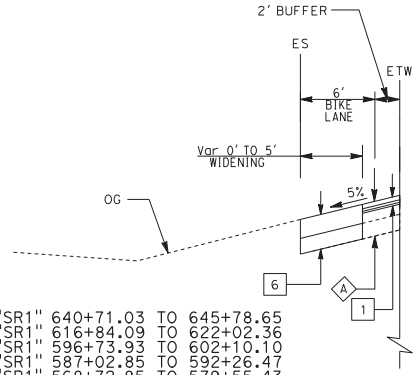
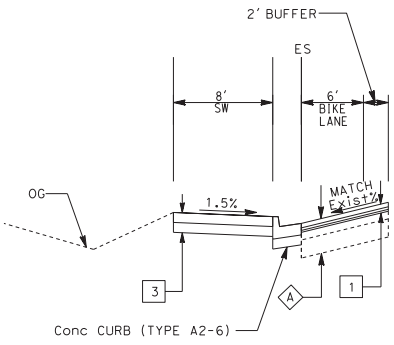
UNIT 0720

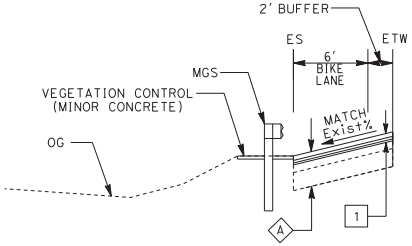
PROJECT NUMBER & PHASE 04180000531



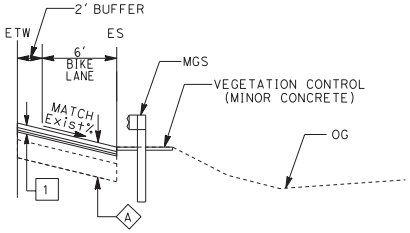
"SR1" 640+71.03 TO 645+78.65
"SR1" 616+84.09 TO 622+02.36
"SR1" 596+73.93 TO 602+10.10
"SR1" 587+02.85 TO 592+26.47
"SR1" 568+72.85 TO 579+55.43
"SR1" 554+80.23 TO 559+56.00
"SR1" 537+21.74 TO 539+14.16



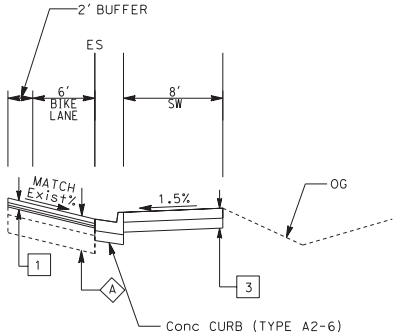
"SR1" 551+13.38 TO 552+37.97



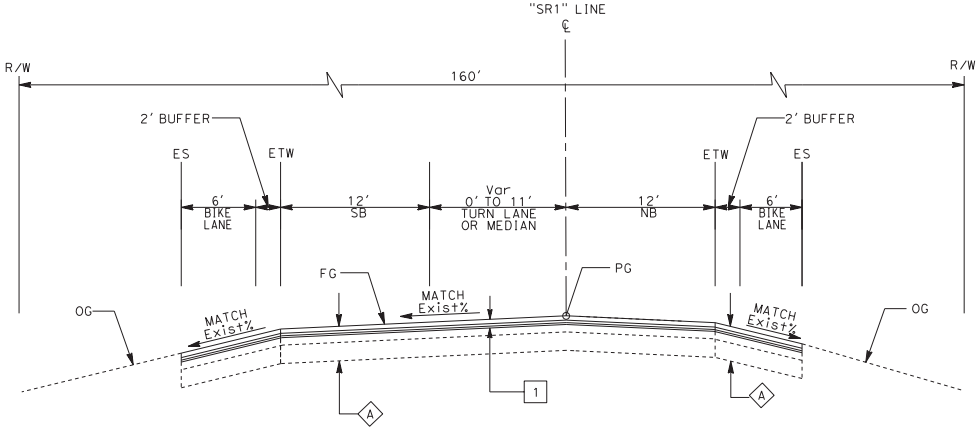
"SR1" 546+08.79 TO 547+23.83
"SR1" 528+39.36 TO 530+01.32



"SR1" 592+99.12 TO 594+61.62
"SR1" 546+25.53 TO 547+71.56
"SR1" 528+41.48 TO 530+04.88



"SR1" 541+02.49 TO 542+65.32
"SR1" 552+75.73 TO 553+75.73



"SR1" 525+55.29 TO 618+69.06

ROUTE 1

TYPICAL CROSS SECTIONS

NO SCALE

X-10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp. 06-30-24 — CIVIL — STATE OF CALIFORNIA

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SAN JOSE, CA 95113-2254

CALTRANS
111 GRAND AVENUE
OAKLAND, CA 94612

REVISED BY	DATE REVISED
.	.

CALCULATED-DESIGNED BY: KEVIN KRAMER
CHECKED BY: JASON HOM

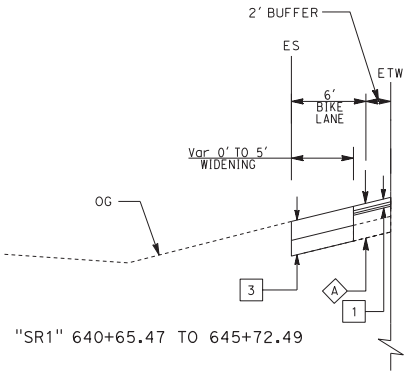
CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

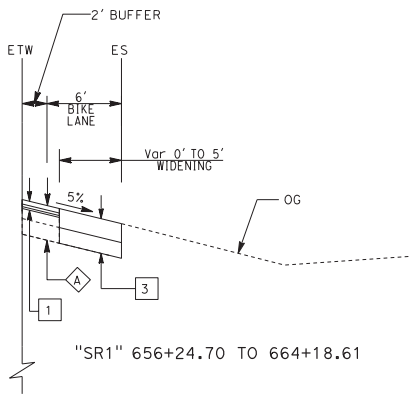
Caltrans

LAST REVISION 10-27-23
DATE PLOTTED => 30-OCT-2023
TIME PLOTTED => 09:57

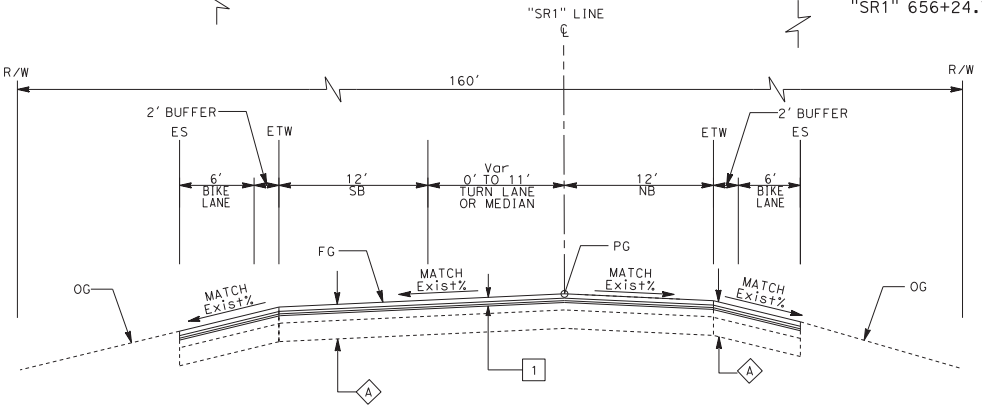
BORDER LAST REVISED 7/2/2010
USERNAME => ernie.garnica
DGN FILE => 0418000053ca010.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0720
PROJECT NUMBER & PHASE 04180000531



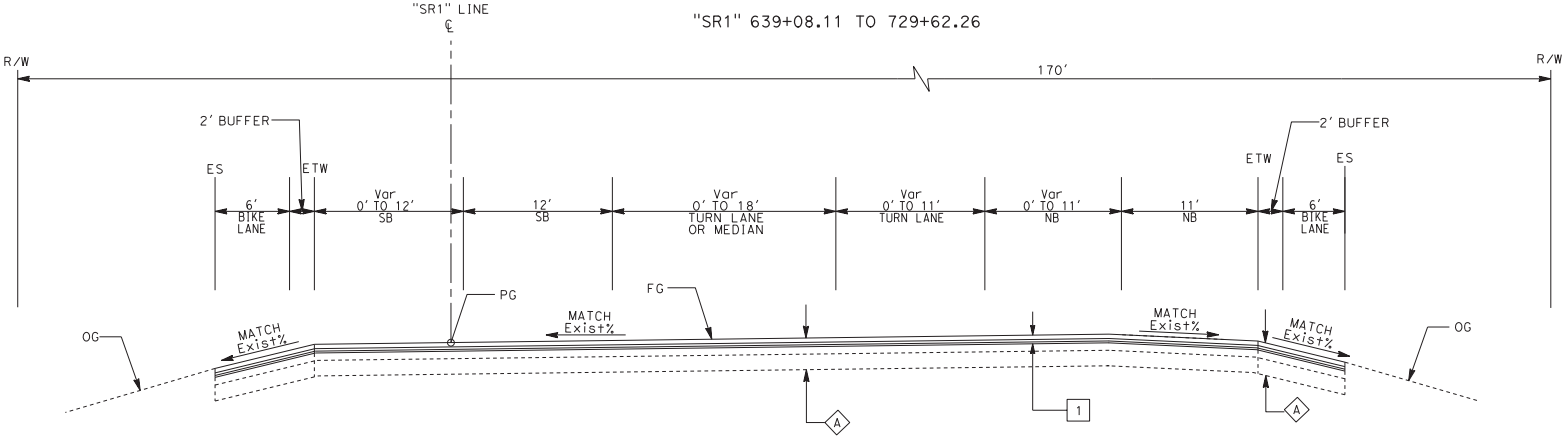
"SR1" 640+65.47 TO 645+72.49



"SR1" 656+24.70 TO 664+18.61



"SR1" 639+08.11 TO 729+62.26



"SR1" 618+69.06 TO 639+08.11

ROUTE 1

TYPICAL CROSS SECTIONS

NO SCALE

X-11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp. 06-30-24 — CIVIL — STATE OF CALIFORNIA

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111 GRAND AVENUE
OAKLAND, CA 94612

REVISED BY	DATE REVISED
.	.

CALCULATED-DESIGNED BY: KEVIN KRAMER
CHECKED BY: JASON HOM

CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 10-27-23
DATE PLOTTED => 30-OCT-2023
TIME PLOTTED => 09:57

BORDER LAST REVISED 7/2/2010

USERNAME => ernie.garnica
DGN FILE => 0418000053ca011.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0720

PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	—	—

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp. 06-30-24 — CIVIL — STATE OF CALIFORNIA

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SAN JOSE, CA 95113-2254

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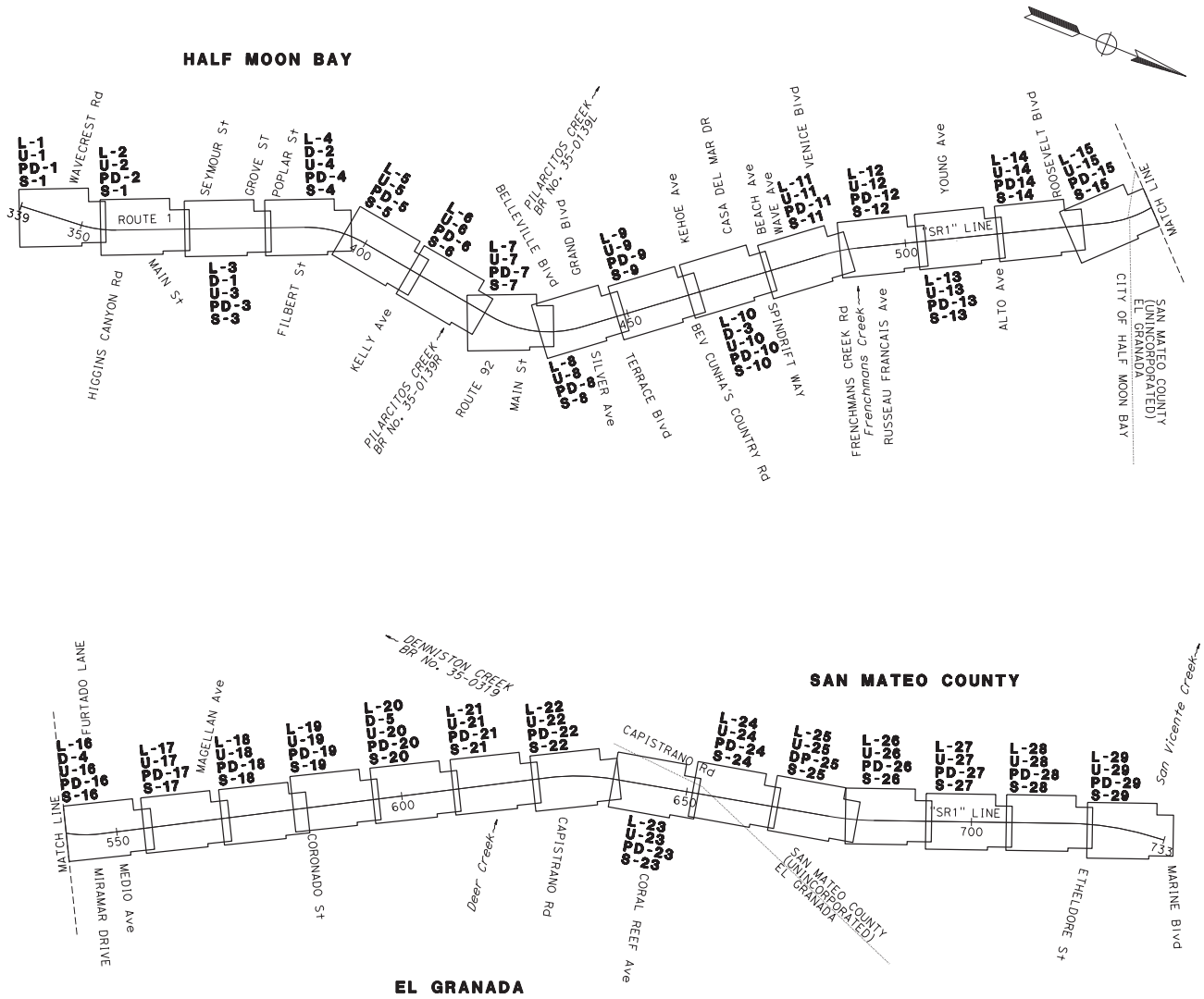
111 GRAND AVENUE
OAKLAND, CA 94612



KEY MAP AND LINE INDEX

NO SCALE

K-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	JASON HOM
Caltrans	SANG KIM	CHECKED BY	SANG KIM
		REVISED BY	
		DATE REVISED	

LAST REVISION 09-27-23
DATE PLOTTED => 30-OCT-2023
TIME PLOTTED => 10:43

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 0418000053da001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	–	–

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp. 06-30-24 — CIVIL — STATE OF CALIFORNIA

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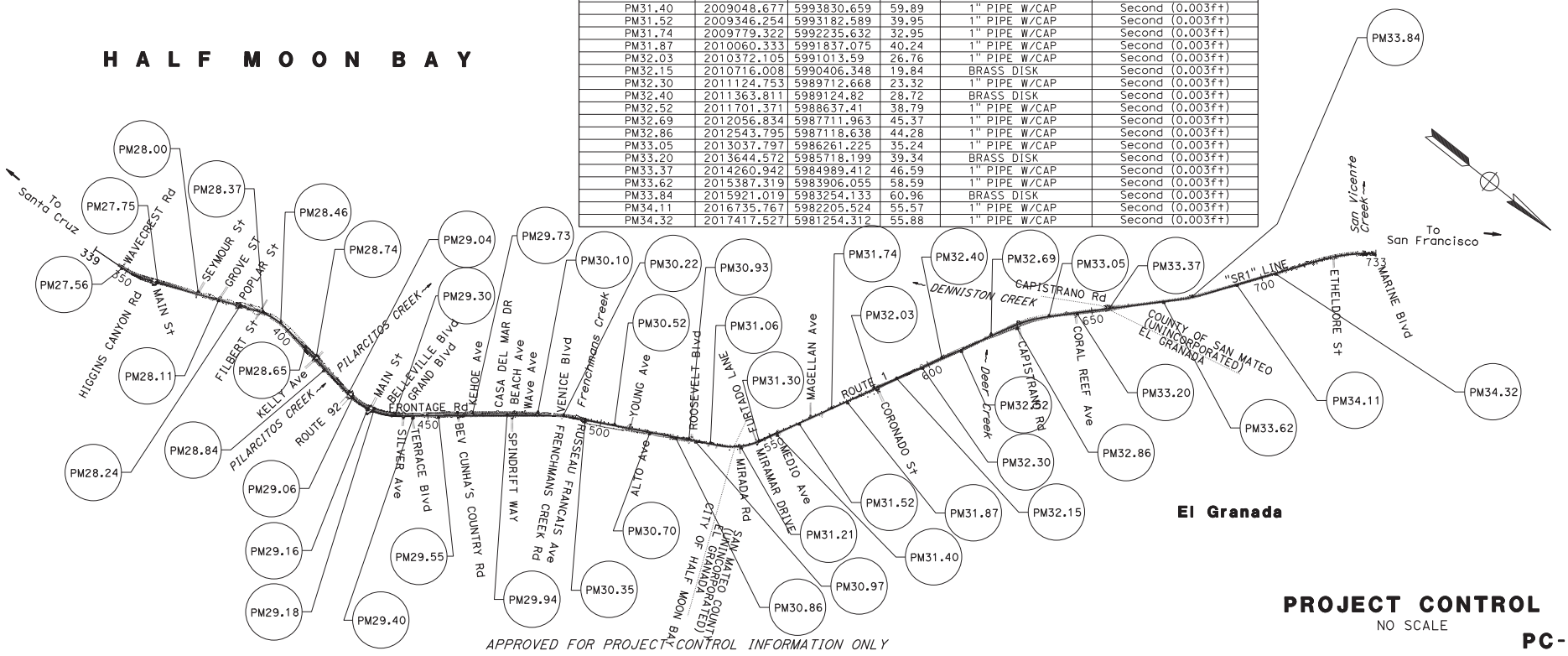
SUITE 675
SAN JOSE, CA 95113-2254

CALTRANS
111 GRAND AVENUE
OAKLAND, CA 94612

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. FOR COMPLETE PROJECT CONTROL DATA, SEE THE SURVEY ON FILE IN THE SURVEYS DEPARTMENT AT THE DISTRICT OFFICE.
3. HORIZONTAL DATUM IS THE NORTH AMERICAN DATUM OF CCS83, CALIFORNIA COORDINATE SYSTEM ZONE 3, EPOCH 2019.55.
4. ELEVATION ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1983 (NAD88).

POINT (#)	NORTHING	EASTING	Elev	DESCRIPTION	ACCURACY
PM27.56	1991269.138	6001819.748	100.13	1" PIPE W/CAP	Second (0.003ft)
PM27.75	1992318.098	6001481.147	95.55	1" PIPE W/CAP	Second (0.003ft)
PM28.00	1993408.305	6000976.02	86.51	SKRIBED "X"	Second (0.003ft)
PM28.11	1994027.754	6000811.46	86.42	BRASS DISK	Second (0.003ft)
PM28.24	1994614.758	6000574.125	85.51	BRASS DISK	Second (0.003ft)
PM28.37	1995226.607	6000256.144	82.17	1" PIPE W/CAP	Second (0.003ft)
PM28.46	1995818.025	6000181.945	76.11	1" PIPE W/CAP	Second (0.003ft)
PM28.65	1996824.527	6000304.783	66.64	1" PIPE W/CAP	Second (0.003ft)
PM28.74	1997222.232	6000290.822	63.68	BRASS DISK	Second (0.003ft)
PM28.84	1997654.773	6000508.98	60.08	BRASS DISK	Second (0.003ft)
PM29.04	1998611.83	6000515.839	56.68	1" PIPE W/CAP	Second (0.003ft)
PM29.06	1998792.949	6000594.001	57.93	BRASS DISK	Second (0.003ft)
PM29.16	1999338.989	6000604.516	58.85	1" PIPE W/CAP	Second (0.003ft)
PM29.18	1999478.458	6000446.797	55.09	BRASS DISK	Second (0.003ft)
PM29.30	2000049.261	6000213.095	55.17	BRASS DISK	Second (0.003ft)
PM29.40	2000512.872	5999957.384	53.82	SKRIBED "X"	Second (0.003ft)
PM29.55	2001083.441	5999496.353	51.86	BRASS DISK	Second (0.003ft)
PM29.73	2001780.485	5998794.229	44.30	1" PIPE W/CAP	Second (0.003ft)
PM29.94	2002582.856	5998208.362	54.19	BRASS DISK	Second (0.003ft)
PM30.10	2003231.619	5997594.748	56.46	BRASS DISK	Second (0.003ft)
PM30.22	2003861.329	5997200.87	66.12	1" PIPE W/CAP	Second (0.003ft)
PM30.35	2004461.257	5996965.319	64.22	1" PIPE W/CAP	Second (0.003ft)
PM30.52	2005181.074	5996501.743	60.75	BRASS DISK	Second (0.003ft)
PM30.70	2006138.267	5996087.853	50.58	BRASS DISK	Second (0.003ft)
PM30.86	2006820.228	5995718.239	47.95	BRASS DISK	Second (0.003ft)
PM30.93	2007112.15	5995483.858	47.80	1" PIPE W/CAP	Second (0.003ft)
PM30.97	2007332.549	5995441.846	48.93	BRASS DISK	Second (0.003ft)
PM31.06	2007675.666	5995197.327	48.21	1" PIPE W/CAP	Second (0.003ft)
PM31.21	2008458.634	5994758.708	68.29	1" PIPE W/CAP	Second (0.003ft)
PM31.30	2008732.687	5994280.178	72.81	BRASS DISK	Second (0.003ft)
PM31.40	2009048.677	5993830.659	59.89	1" PIPE W/CAP	Second (0.003ft)
PM31.52	2009346.254	5993182.589	39.95	1" PIPE W/CAP	Second (0.003ft)
PM31.74	2009779.322	5992235.632	32.95	1" PIPE W/CAP	Second (0.003ft)
PM31.87	2010060.333	5991837.075	40.24	1" PIPE W/CAP	Second (0.003ft)
PM32.03	2010372.105	5991013.59	26.76	1" PIPE W/CAP	Second (0.003ft)
PM32.15	2010716.008	5990406.348	19.84	BRASS DISK	Second (0.003ft)
PM32.30	2011124.753	5989712.668	23.32	1" PIPE W/CAP	Second (0.003ft)
PM32.40	2011363.811	5989124.82	28.72	BRASS DISK	Second (0.003ft)
PM32.52	2011701.371	5988637.41	38.79	1" PIPE W/CAP	Second (0.003ft)
PM32.69	2012056.834	5987711.963	45.37	1" PIPE W/CAP	Second (0.003ft)
PM32.86	2012543.795	5987118.638	44.28	1" PIPE W/CAP	Second (0.003ft)
PM33.05	2013037.797	5986261.225	35.24	1" PIPE W/CAP	Second (0.003ft)
PM33.20	2013644.572	5985718.199	39.34	BRASS DISK	Second (0.003ft)
PM33.37	2014260.942	5984989.412	46.59	1" PIPE W/CAP	Second (0.003ft)
PM33.62	2015387.319	5983906.055	58.59	1" PIPE W/CAP	Second (0.003ft)
PM33.84	2015921.019	5983254.133	60.96	BRASS DISK	Second (0.003ft)
PM34.11	2016735.767	5982205.524	55.57	1" PIPE W/CAP	Second (0.003ft)
PM34.32	2017417.527	5981254.312	55.88	1" PIPE W/CAP	Second (0.003ft)



APPROVED FOR PROJECT CONTROL INFORMATION ONLY

PROJECT CONTROL

NO SCALE

PC-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM	CALCULATED-DESIGNED BY: JASON HOM	CHECKED BY: SANG KIM
		REVISED BY: .	DATE REVISED: .

LAST REVISION 10-27-23
DATE PLOTTED => 30-OCT-2023
TIME PLOTTED => 10:50

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 0418000053dc001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

NOTE:

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

CURVE DATA

No. Ⓗ	R	Δ	T	L	N-COORDINATE	E-COORDINATE
5	2000.0′	35°10′27"	633.94′	1227.81′	2006989.874	5993330.702

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp 06-30-24 — CIVIL — STATE OF CALIFORNIA

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OAKLAND, CA 94612

HALF MOON BAY

38.01′ Lt "SR1" +08.16 CONFORM
37.20′ Lt "SR1" +44.25 CONFORM
45.94′ Lt "SR1" +40.54 CONFORM
47.83′ Lt "SR1" +65.15 CONFORM
42.97′ Lt "SR1" +98.37 CONFORM
47.23′ Lt "SR1" +36.42 CONFORM
45.87′ Lt "SR1" +58.82 CONFORM
49.16′ Lt "SR1" +86.99 CONFORM
39.71′ Lt "SR1" +07.73 CONFORM
38.62′ Lt "SR1" +22.39 CONFORM
38.81′ Lt "SR1" +71.28 CONFORM
37.62′ Lt "SR1" +96.70 CONFORM
57.18′ Lt "SR1" +44.95 CONFORM
60.68′ Lt "SR1" +80.54 CONFORM
33.95′ Rt "SR1" +94.10 CONFORM
37.72′ Rt "SR1" +16.02 CONFORM
113.92′ Rt "SR1" +51.58 CONFORM
113.25′ Rt "SR1" +72.12 CONFORM

"SR1" 534+72.91 BC
Beg FULL DEPTH REPAIR 20.88′ Lt "SR1" +21.74
END FULL DEPTH REPAIR 24.90′ Lt "SR1" +14.16
FULL DEPTH PAVEMENT SECTION

MATCH LINE
R/W
ROUTE 1
N 27°41′55" W 2 4311.88
"SR1" LINE
535
540

CITY OF HALF MOON BAY
SAN MATEO COUNTY (UNINCORPORATED)
EL GRANADA

MIRADA Rd

BUS STOP SIGN TO BE PROTECTED IN PLACE
SIDEWALK No. 9, SEE SHEET C-35
BUS STOP SIGN TO BE PROTECTED IN PLACE

El Granada

FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50′

L-15

REVISED BY	DATE REVISED
.	.

KEVIN KRAMER — JASON HOM — CALCULATED-DESIGNED BY — CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

LAST REVISION 10-27-23
DATE PLOTTED => 14-DEC-2023
TIME PLOTTED => 09:16

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 0418000053ea015.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp. 06-30-24 — CIVIL — STATE OF CALIFORNIA

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NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT
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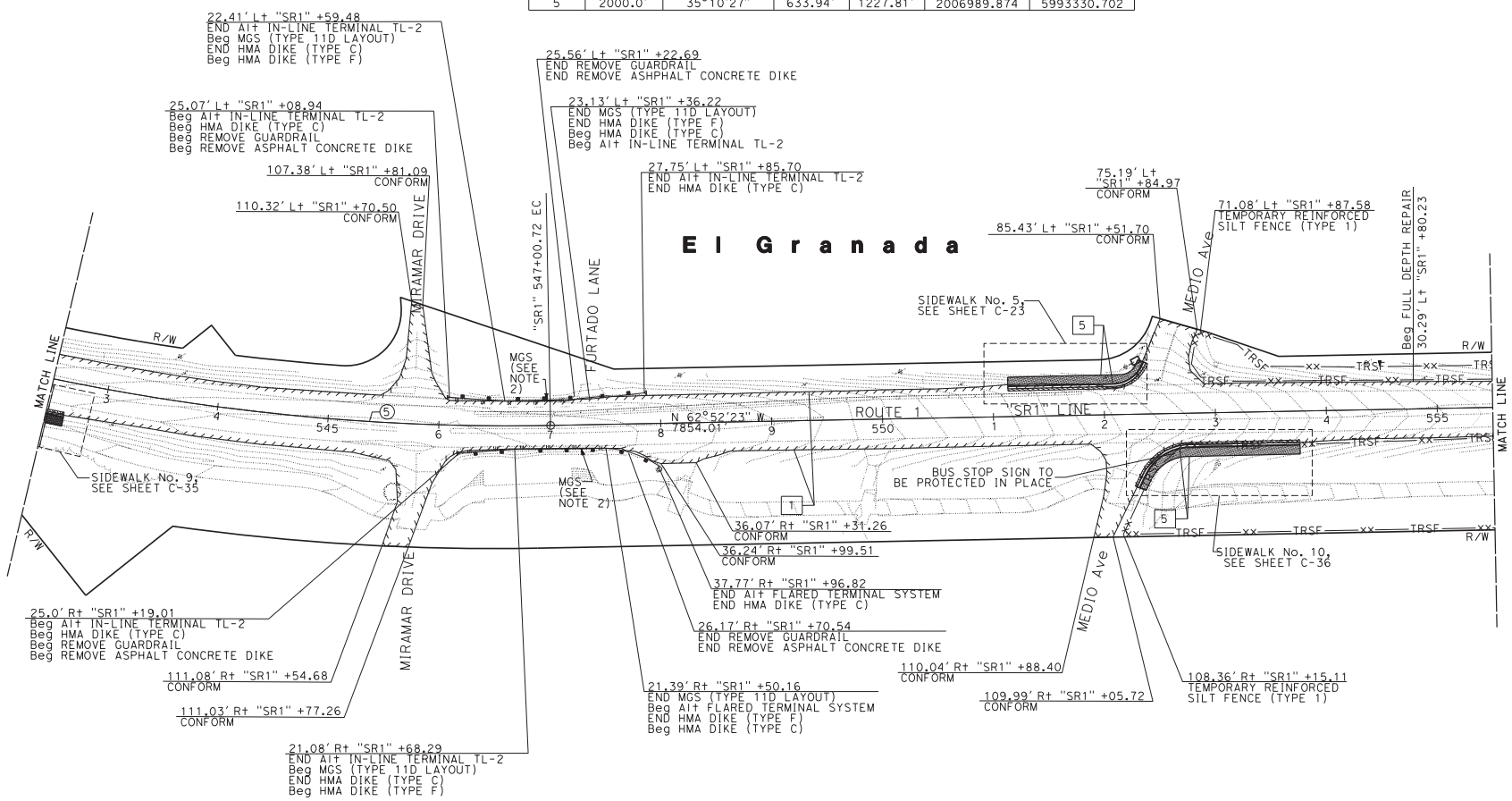
CURVE DATA

No. ⑤	R	Δ	T	L	N-COORDINATE	E-COORDINATE
5	2000.0′	35°10′27"	633.94′	1227.81′	2006989.874	5993330.702



FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50′

L-16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM | CALCULATED-DESIGNED BY: KEVIN KRAMER | CHECKED BY: JASON HOM | REVISED BY: . | DATE REVISED: .

LAST REVISION 10-27-23 | DATE PLOTTED => 14-DEC-2023 | TIME PLOTTED => 09:16

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 0418000053ea016.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Sang Kim
No. C66289
Exp 06-30-24
CIVIL
STATE OF CALIFORNIA

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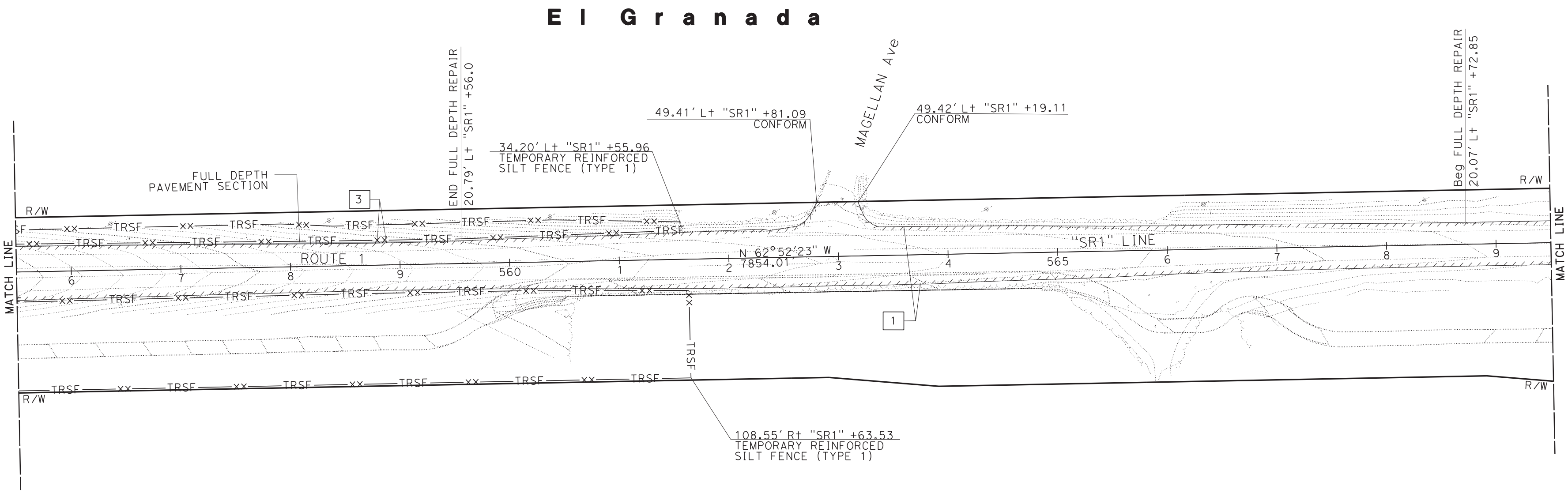
CALTRANS
111 GRAND AVENUE
OAKLAND, CA 94612

NOTE:

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



FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50'

L-17

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR	SANG KIM
CALCULATED-DESIGNED BY	KEVIN KRAMER
CHECKED BY	JASON HOM
REVISED BY	DATE REVISED

LAST REVISION 10-27-23

DATE PLOTTED => 14-DEC-2023
TIME PLOTTED => 09:16

BORDER LAST REVISED 7/2/2010

USERNAME => ernie.garnica
DGN FILE => 0418000053ea017.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0720

PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Sang Kim
No. C66289
Exp. 06-30-24
CIVIL
STATE OF CALIFORNIA

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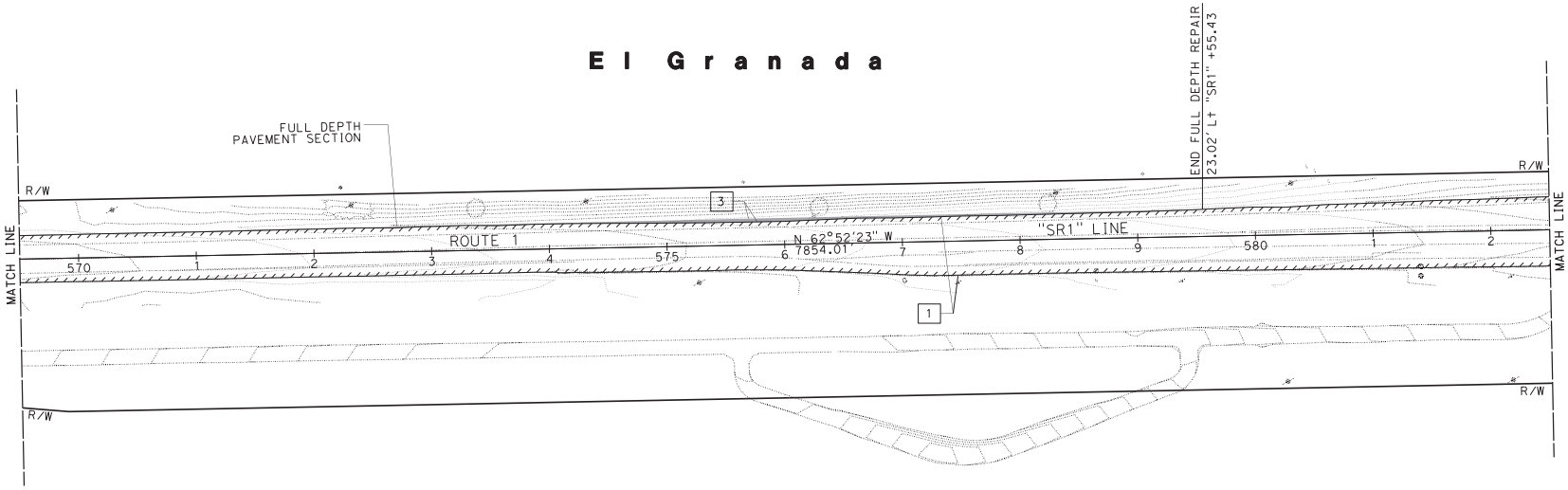
OAKLAND, CA 94612

NOTE:

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

El Granada



FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50'

L-18

CALCULATED-DESIGNED BY	KEVIN KRAMER	REVISED BY
CHECKED BY	JASON HOM	DATE REVISED
CONSULTANT FUNCTIONAL SUPERVISOR	SANG KIM	.
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	Caltrans	.

LAST REVISION 10-27-23
DATE PLOTTED => 14-DEC-2023
TIME PLOTTED => 09:16

BORDER LAST REVISED 7/2/2010

USERNAME => ernie.garnica
DGN FILE => 0418000053ea018.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0720

PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Sang Kim
No. C66289
Exp. 06-30-24
CIVIL
STATE OF CALIFORNIA

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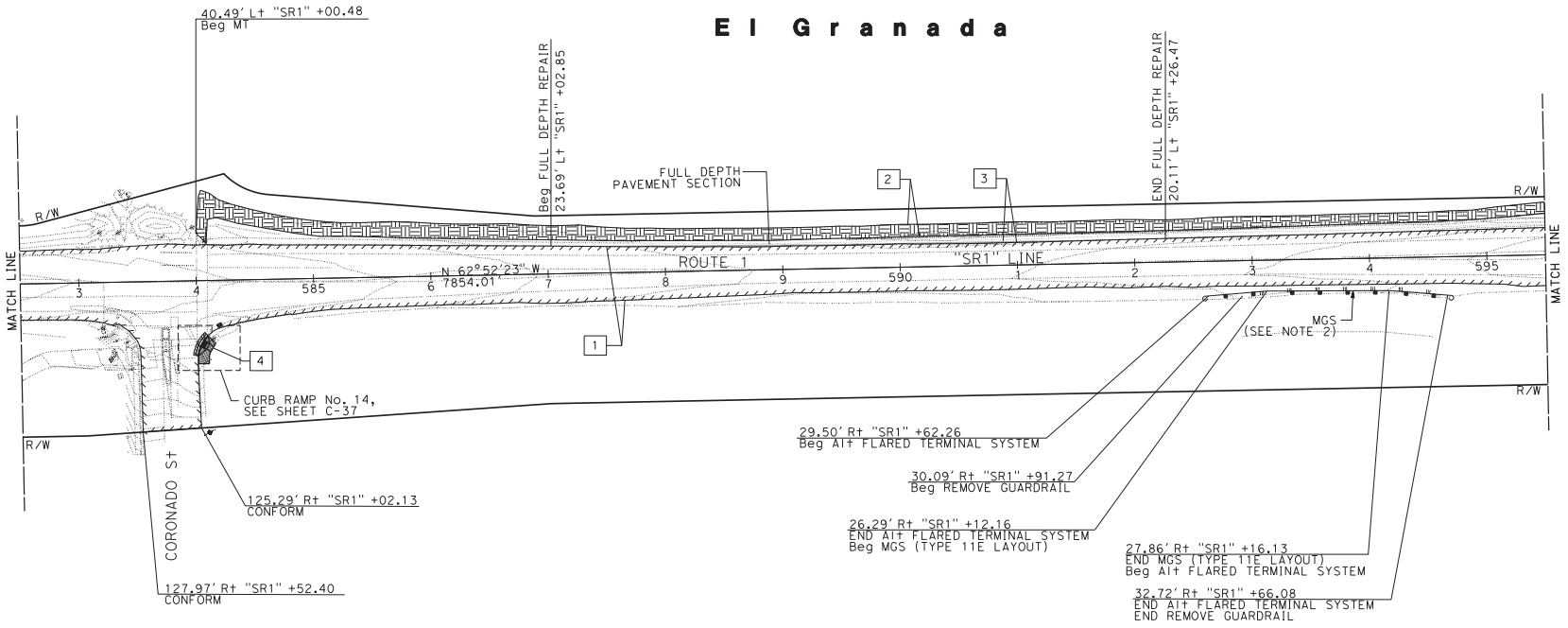

FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50'

L-19

REVISED BY	.	KEVIN KRAMER	CALCULATED-DESIGNED BY
DATE REVISED	.	JASON HOM	CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 10-27-23
DATE PLOTTED => 14-DEC-2023
TIME PLOTTED => 09:16

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 0418000053ea019.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp. 06-30-24 — CIVIL — STATE OF CALIFORNIA

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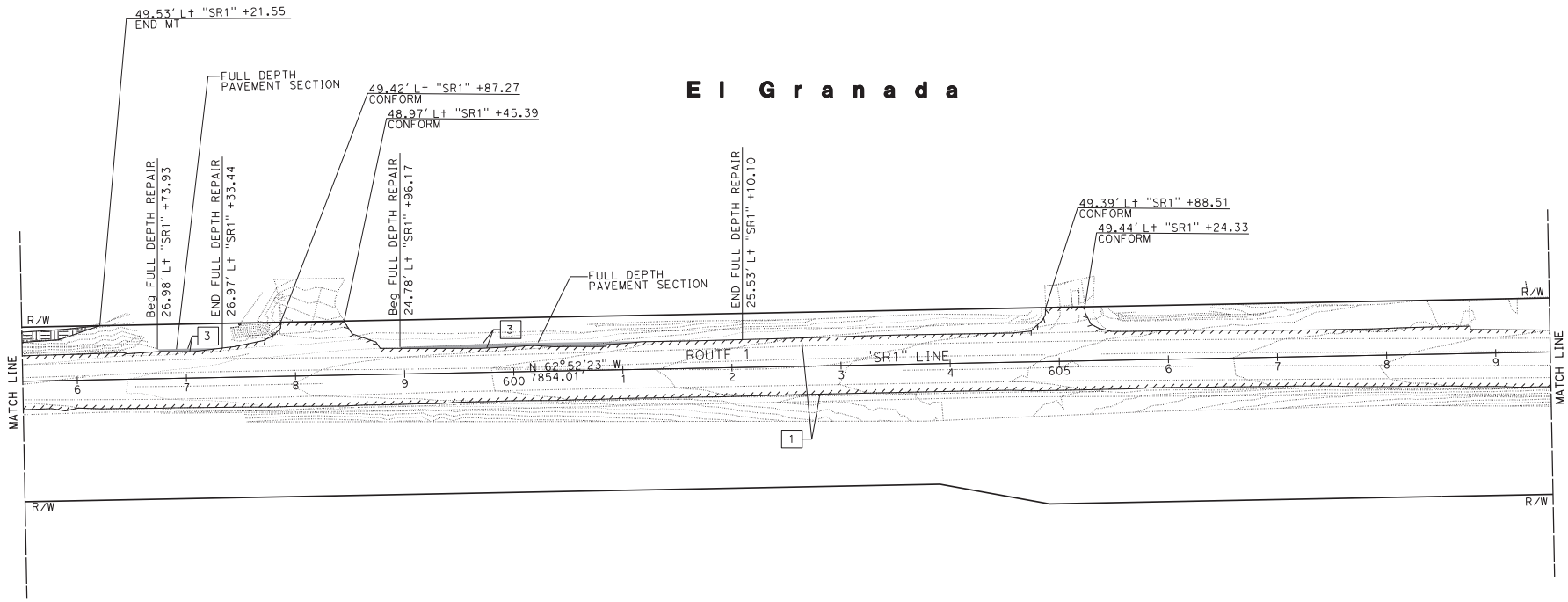

FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50'

L-20

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
Caltrans	SANG KIM	KEVIN KRAMER	JASON HOM	.	.

LAST REVISION 10-27-23 | DATE PLOTTED => 14-DEC-2023 | TIME PLOTTED => 09:16

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 0418000053ea020.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp. 06-30-24 — CIVIL — STATE OF CALIFORNIA

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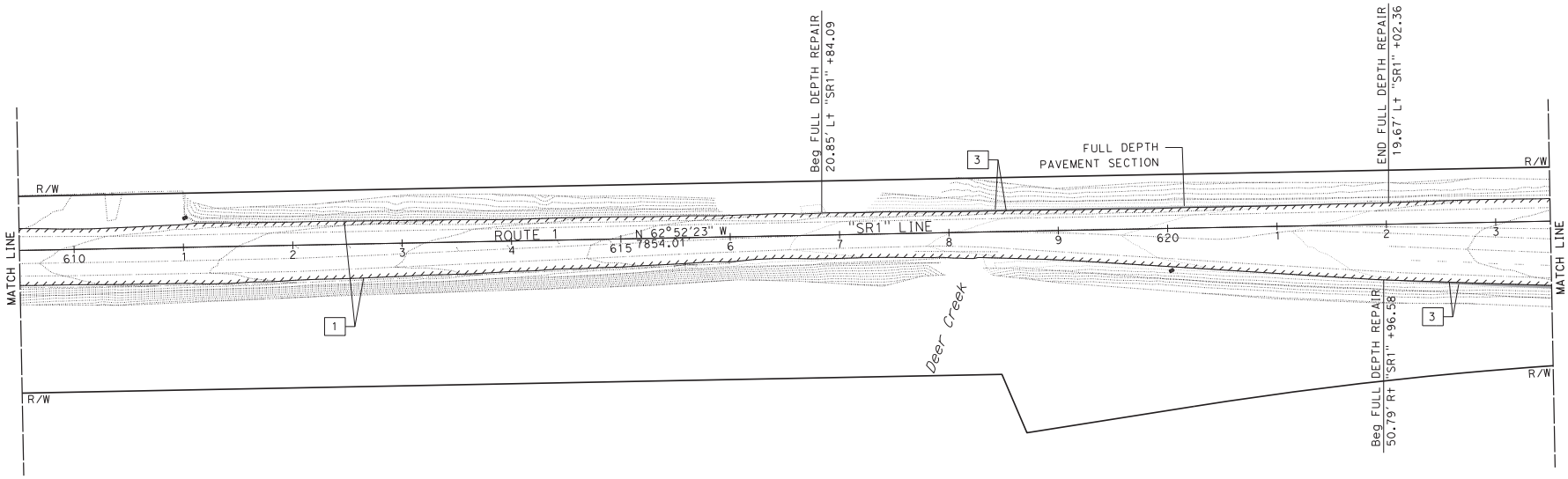

FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50'

L-21

CALCULATED-DESIGNED BY	KEVIN KRAMER	REVISED BY	.
CHECKED BY	JASON HOM	DATE REVISED	.

CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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LAST REVISION 10-27-23 | DATE PLOTTED => 14-DEC-2023 | TIME PLOTTED => 09:16

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 0418000053ea021.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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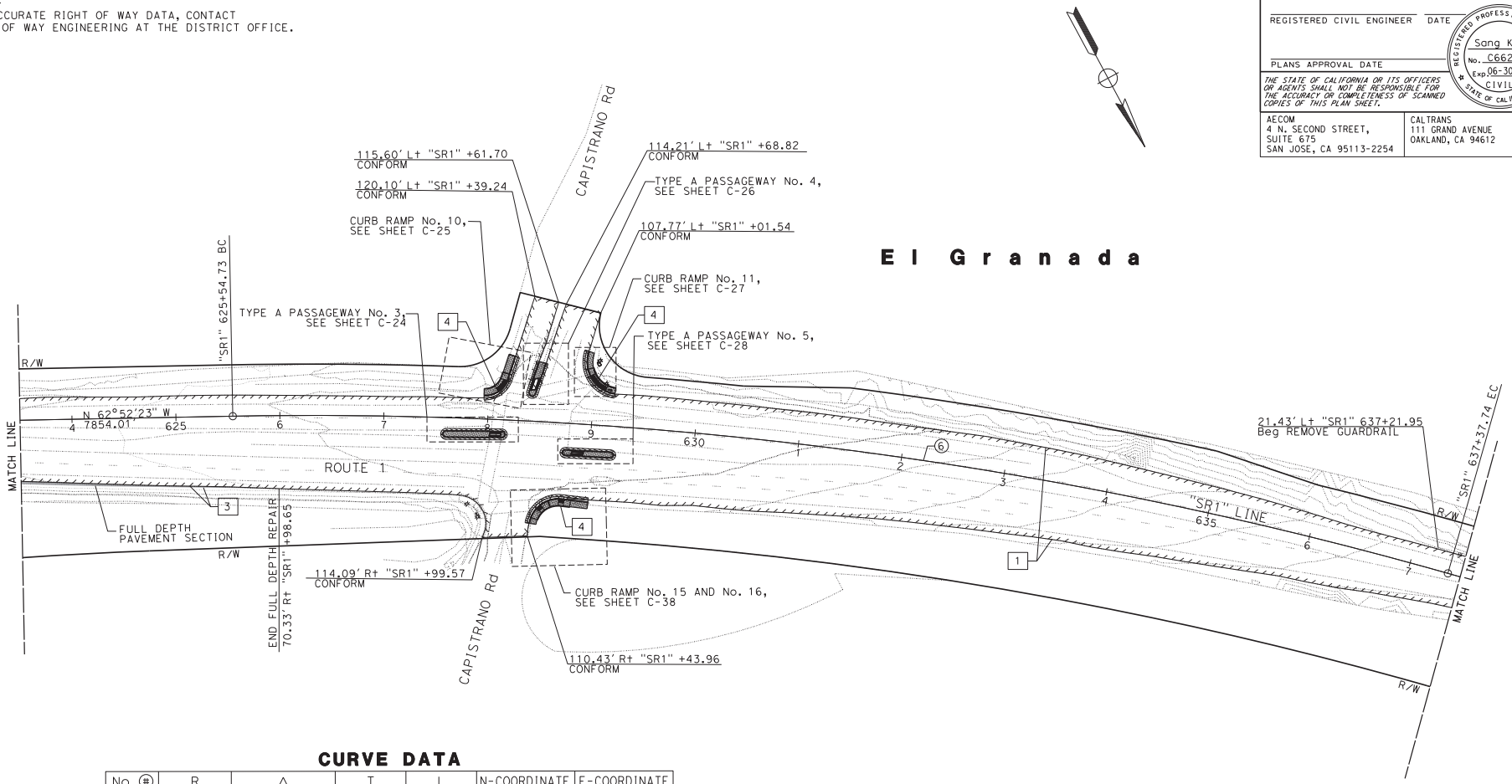

CURVE DATA

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FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50'

L-22

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
Caltrans	SANG KIM	KEVIN KRAMER	JASON HOM	.	.

LAST REVISION 10-27-23
DATE PLOTTED => 14-DEC-2023
TIME PLOTTED => 09:17

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 0418000053ea022.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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SAN MATEO COUNTY

NOTE:

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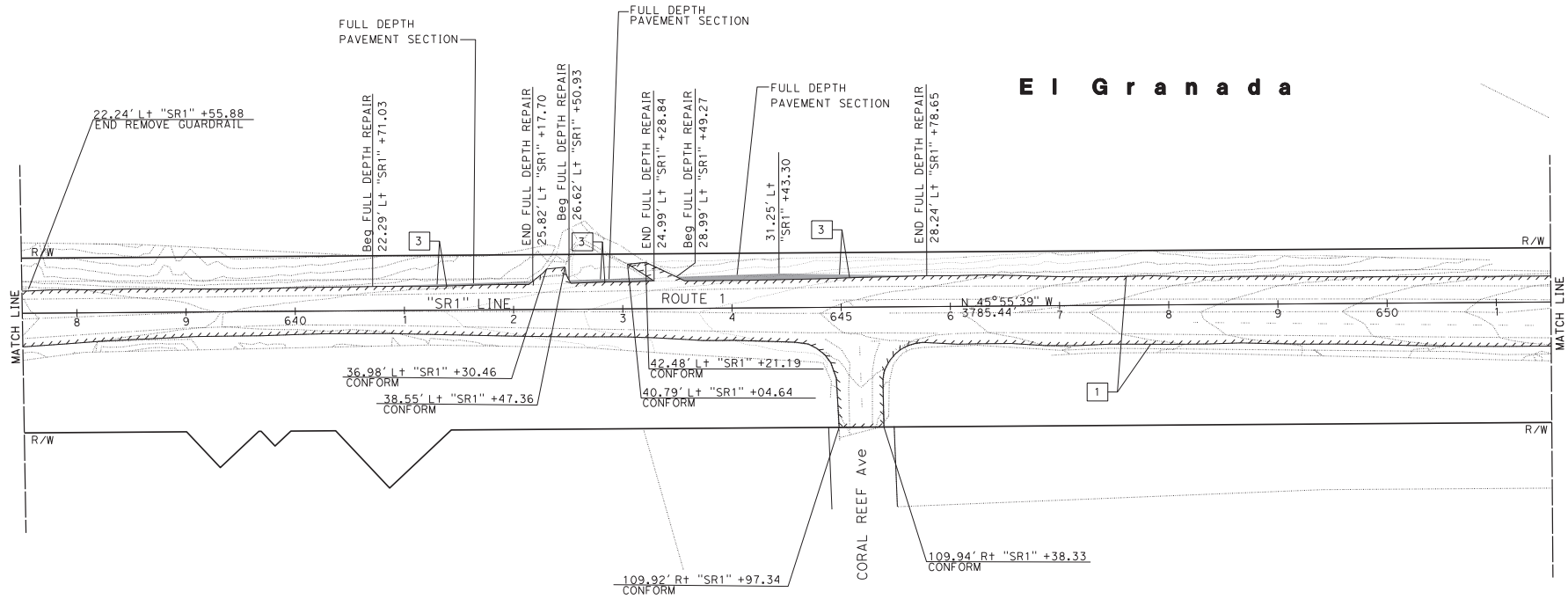

FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50'

L-23

REVISED BY	DATE REVISED	CALCULATED-DESIGNED BY	CHECKED BY	CONSULTANT FUNCTIONAL SUPERVISOR
.	.	KEVIN KRAMER	JASON HOM	SANG KIM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

LAST REVISION 10-27-23
DATE PLOTTED => 14-DEC-2023
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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Sang Kim
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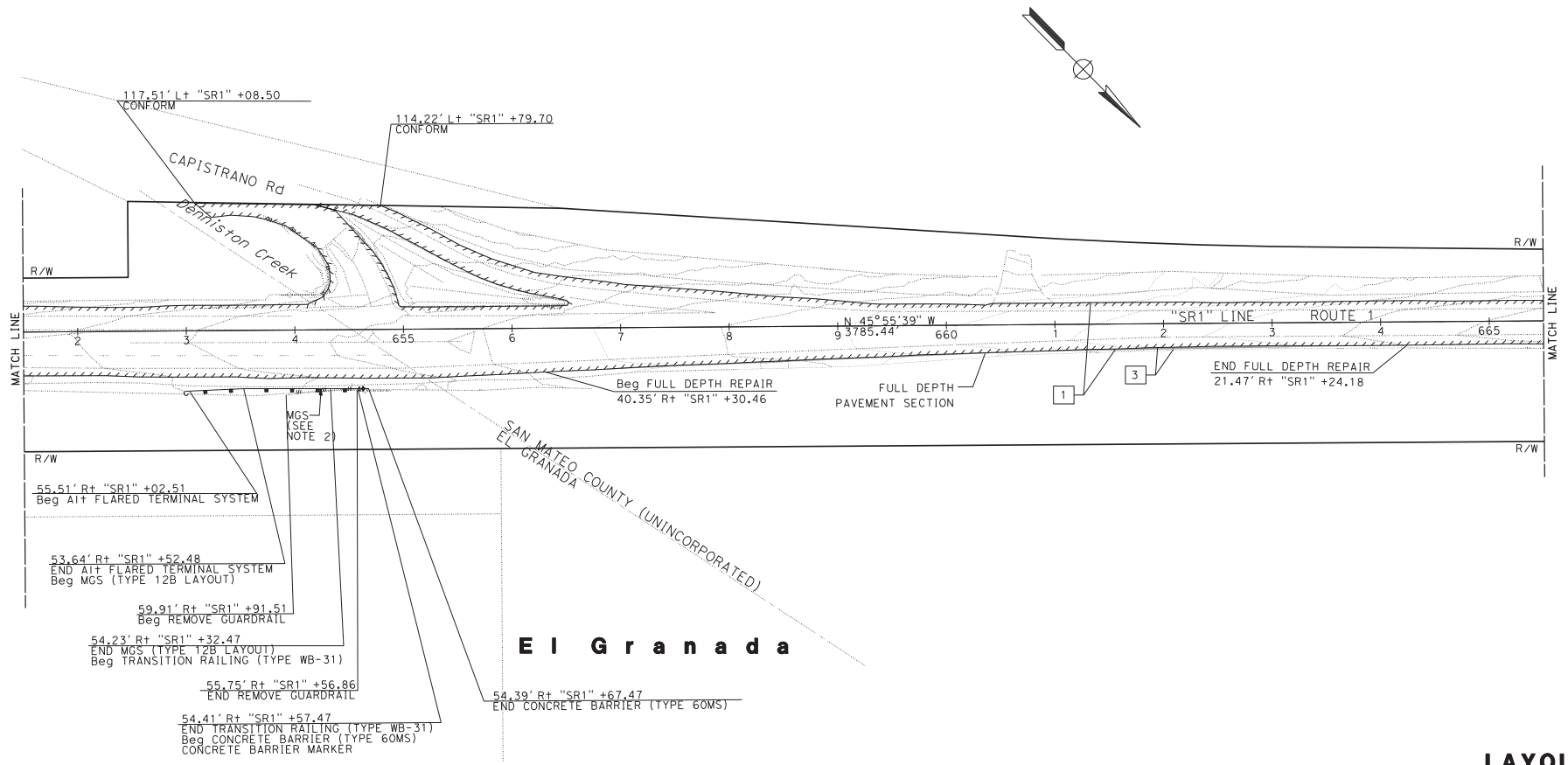

FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50'

L-24

LAST REVISION 10-27-23
DATE PLOTTED => 14-DEC-2023
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM
CALCULATED-DESIGNED BY: KEVIN KRAMER
CHECKED BY: JASON HOM
REVISED BY: .
DATE REVISED: .

BORDER LAST REVISED 7/2/2010
USERNAME => ernie.garnica
DGN FILE => 0418000053eq024.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0720
PROJECT NUMBER & PHASE 04180000531

NOTE:

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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CURVE DATA

No. ⑦	R	Δ	T	L	N-COORDINATE	E-COORDINATE
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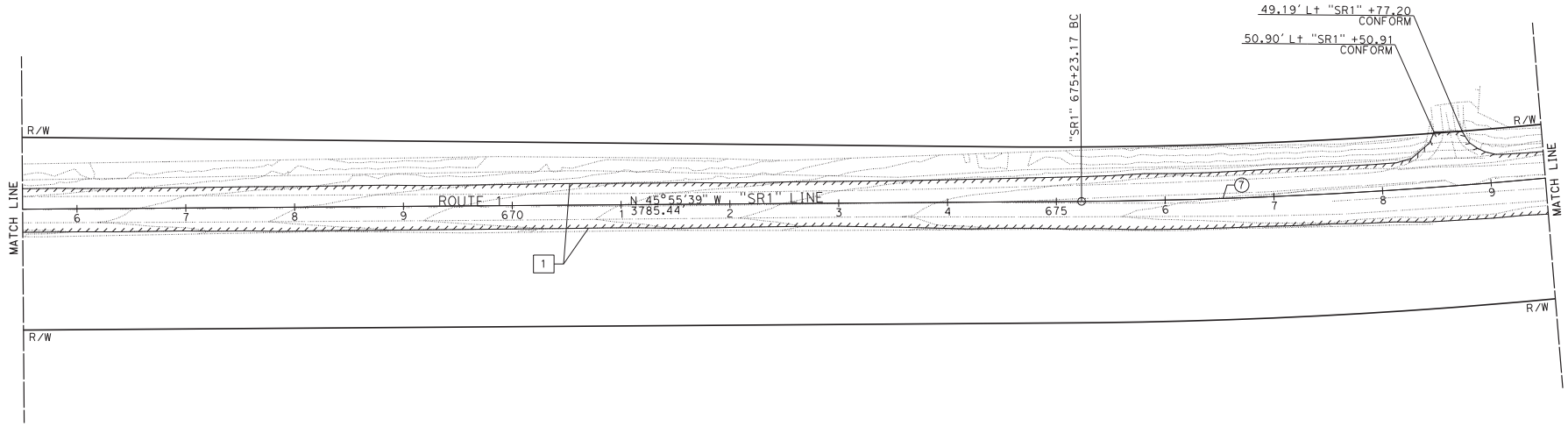

FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50′

L-25

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
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CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

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DATE PLOTTED => 14-DEC-2023
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BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 0418000053ea025.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

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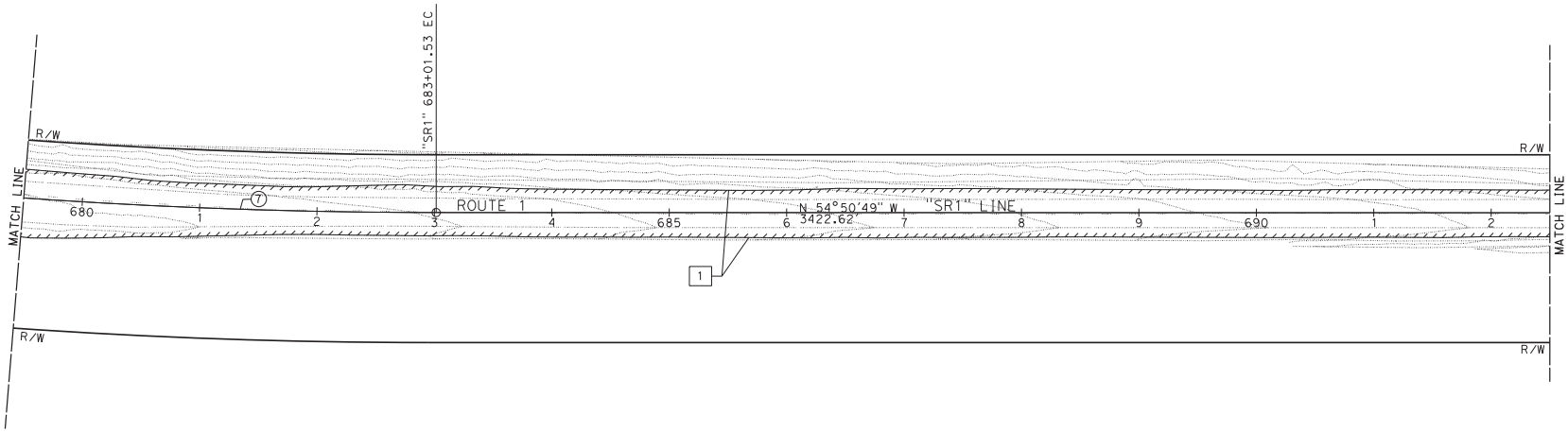
CURVE DATA

No. ⑦	R	Δ	T	L	N-COORDINATE	E-COORDINATE
7	5000.0′	8°55′09″	389.96′	778.35′	2012077.885	5980096.653



FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50′

L-26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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.	.

KEVIN KRAMER — JASON HOM — CALCULATED-DESIGNED BY — CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

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BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 0418000053ea026.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Sang Kim
No. C66289
Exp. 06-30-24
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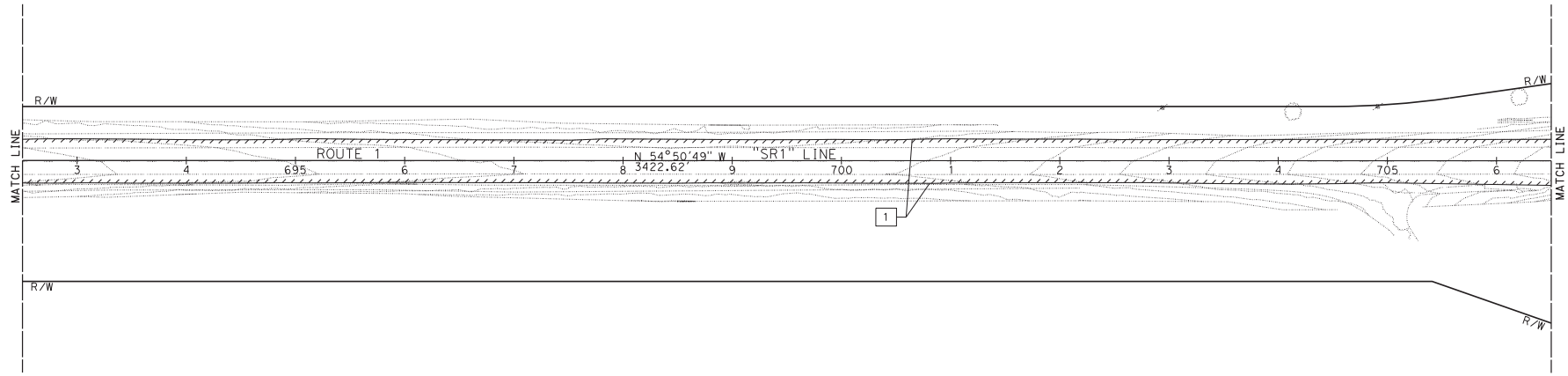

FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50'

L-27

CALCULATED-DESIGNED BY	KEVIN KRAMER	REVISED BY	.	.
CHECKED BY	JASON HOM	DATE REVISED		

CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

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TIME PLOTTED => 09:17

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USERNAME => ernie.garnica
DGN FILE => 0418000053eq027.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0720

PROJECT NUMBER & PHASE 04180000531

NOTE:

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Sang Kim
No. C66289
Exp. 06-30-24
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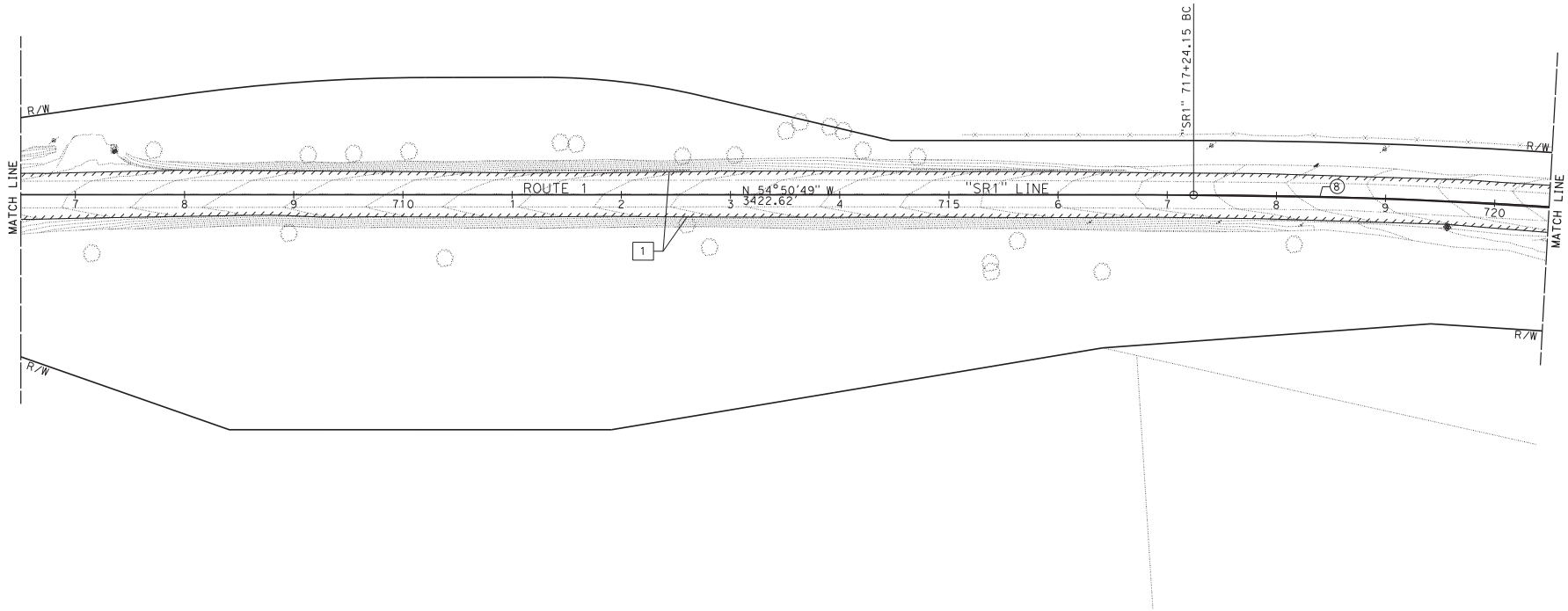
CURVE DATA

No. (#)	R	Δ	T	L	N-COORDINATE	E-COORDINATE
8	5000.0′	15°31′20"	681.46′	1354.58′	2022224.668	5983055.902



FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50′

L-28

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
KEVIN KRAMER	JASON HOM	.	.

CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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LAST REVISION 10-27-23
DATE PLOTTED => 14-DEC-2023
TIME PLOTTED => 09:17

BORDER LAST REVISED 7/2/2010

USERNAME => ernie.garnica
DGN FILE => 0418000053eq028.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0720

PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Sang Kim No. C66289 Exp. 06-30-24 CIVIL STATE OF CALIFORNIA

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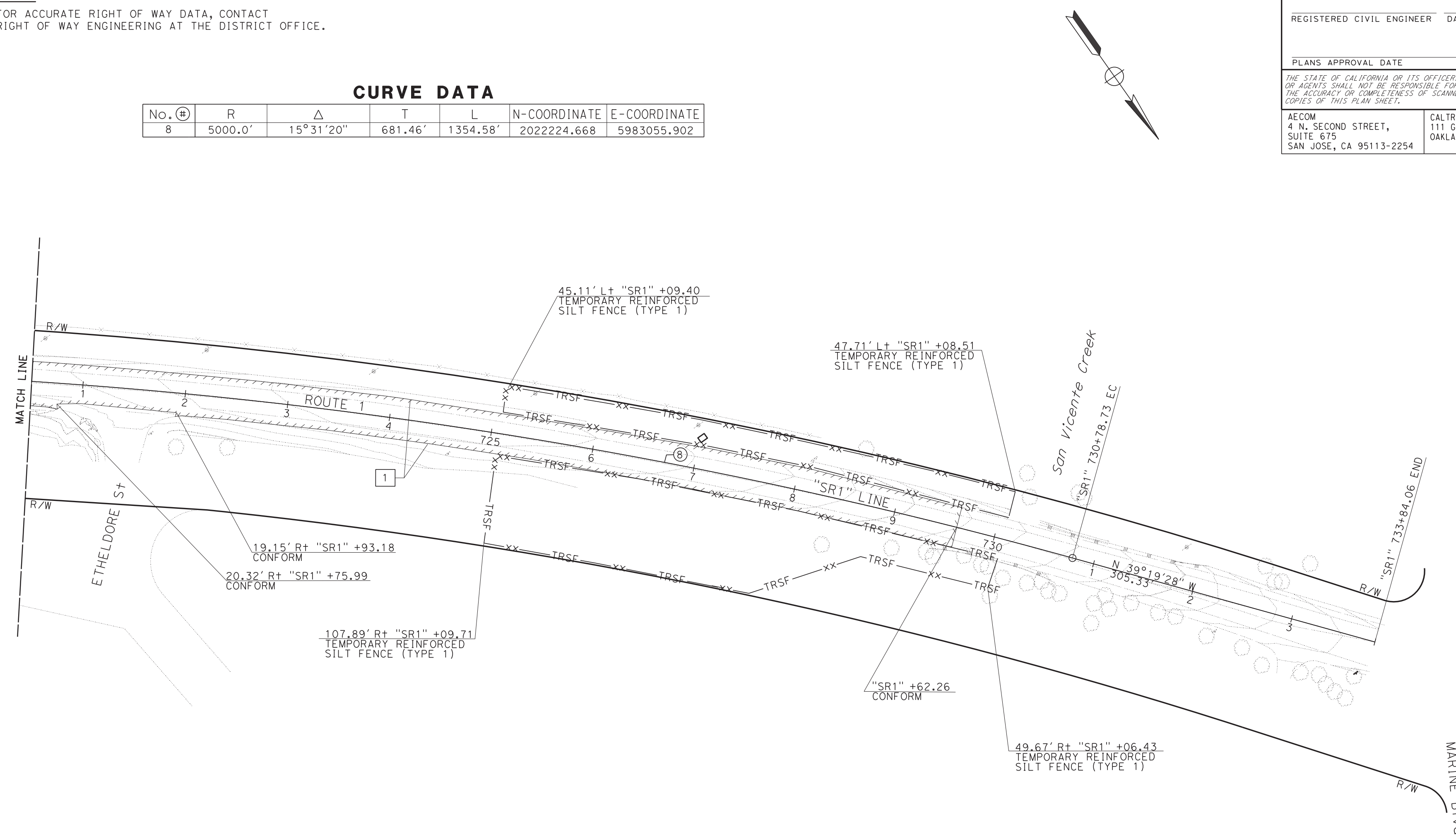
CURVE DATA

No. #	R	Δ	T	L	N-COORDINATE	E-COORDINATE
8	5000.0′	15°31′20″	681.46′	1354.58′	2022224.668	5983055.902



FOR NOTES, ABBBREVIATIONS AND LEGEND, SEE SHEET L-1

LAYOUT

SCALE: 1" = 50′

L-29

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM
CALCULATED-DESIGNED BY: KEVIN KRAMER
CHECKED BY: JASON HOM
REVISED BY
DATE REVISED

LAST REVISION 10-27-23
DATE PLOTTED => 14-DEC-2023
TIME PLOTTED => 09:17

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp. 06-30-24 — CIVIL — STATE OF CALIFORNIA

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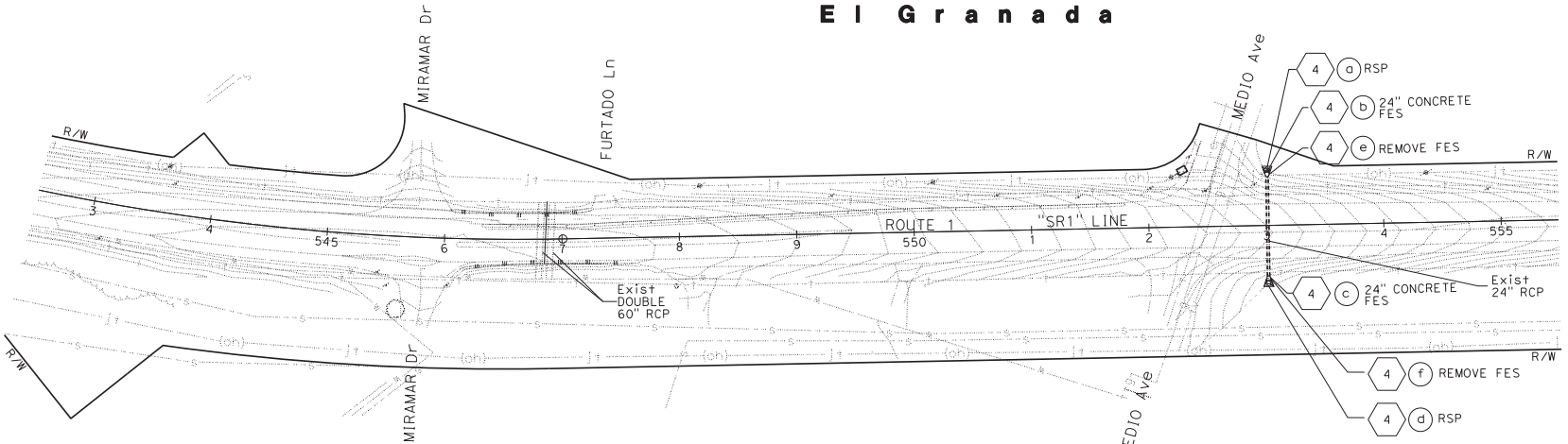

FOR NOTES AND LEGEND,
SEE SHEET D-1

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
Caltrans	SANG KIM	KEVIN KRAMER	NELSON HOM	.	.

LAST REVISION 10-27-23
DATE PLOTTED => 30-OCT-2023
TIME PLOTTED => 13:12

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 04180000053io003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Sang Kim
No. C66289
Exp. 06-30-24
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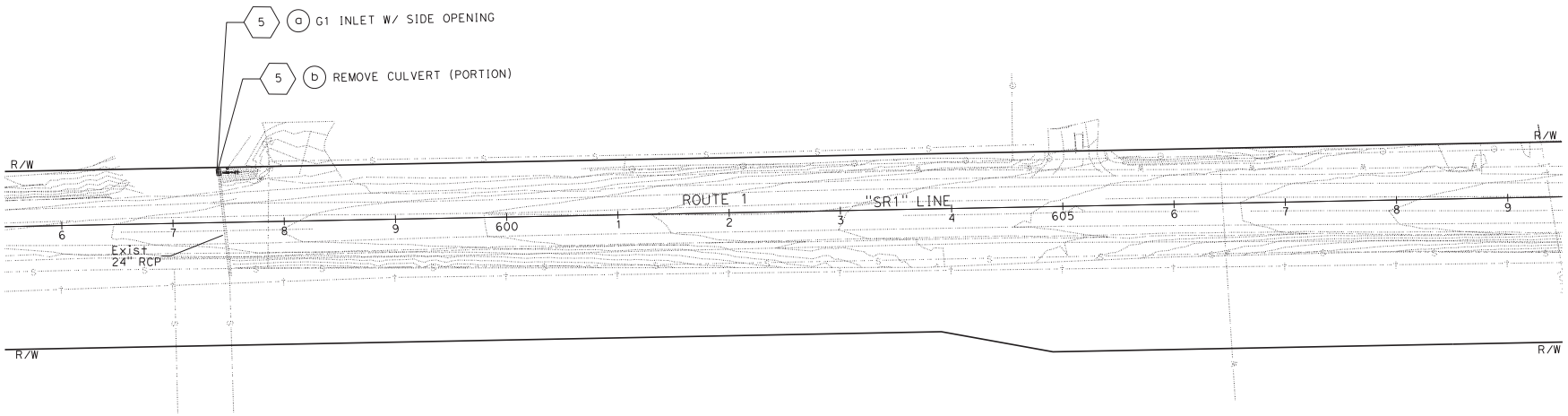
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

El Granada



FOR NOTES AND LEGEND,
SEE SHEET D-1

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
Caltrans	SANG KIM	KEVIN KRAMER	NELSON HOM	.	.

LAST REVISION
DATE PLOTTED => 30-OCT-2023
TIME PLOTTED => 13:12

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 04180000053io004.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

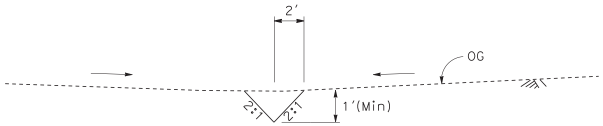
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER — No. XXXXXX — Exp XX-XX-24 — CIVIL — STATE OF CALIFORNIA

AECOM
4 N. SECOND STREET,
SUITE 675
SAN JOSE, CA 95113-2254

CALTRANS
111 GRAND AVENUE
OAKLAND, CA 94612

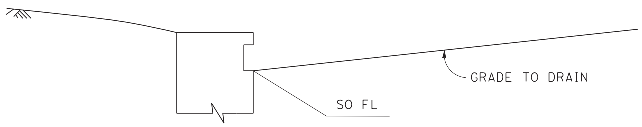
NOTE:
FOR G1 INLET DETAILS NOT SHOWN SEE STANDARD PLAN D73B, D73C, D73F, D73G, AND D77B.



~~UNLINED DITCH (TYPICAL)~~

~~1~~

Not in San Mateo County LCP



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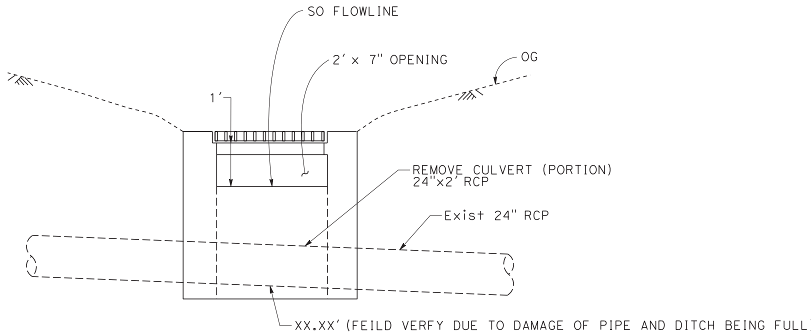

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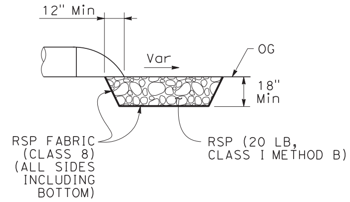

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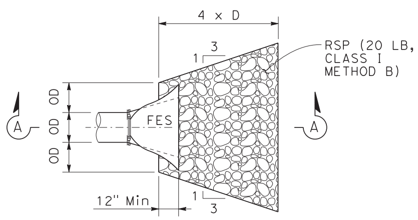
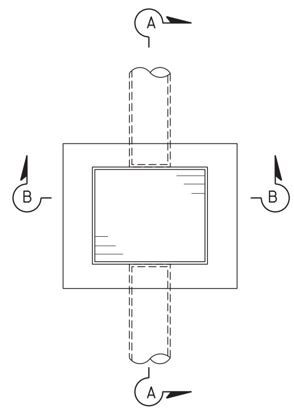


PLAN
CULVERT WITH END SECTION

RSP DETAIL
VARIOUS LOCATIONS



PLAN

G1 W/ SIDE OPENING

5

DRAINAGE DETAILS
DD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM
CALCULATED-DESIGNED BY: KEVIN KRAMER
CHECKED BY: NELSON HOM
REVISED BY / DATE REVISED

LAST REVISION 10-27-23 DATE PLOTTED => 30-OCT-2023 TIME PLOTTED => 13:14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Sang Kim — No. C66289 — Exp. 06-30-24 — CIVIL — STATE OF CALIFORNIA

AECOM
4 N. SECOND STREET,
SUITE 675
SAN JOSE, CA 95113-2254

CALTRANS
111 GRAND AVENUE
OAKLAND, CA 94612

DRAINAGE QUANTITIES

DRAINAGE SYSTEM No.	DRAINAGE UNIT	RSP (150LB CLASS III, METHOD B) (CY)	ROCK SLOPE PROTECTION FABRIC (CLASS 8)	18" REINFORCED CONCRETE PIPE	18" CONCRETE FLARED END SECTION	24" CONCRETE FLARED END SECTION	REMOVE CULVERT (LF)	REMOVE FLARED END SECTION (EA)	DITCH EXCAVATION	DRAINAGE INLET MARKER	STRUCTURAL CONCRETE, DRAINAGE INLET	INLET FRAME AND GRATE	MISCELLANEOUS IRON AND STEEL	FRAME AND GRATE (TYPE 24-12) (N)	HEIGHT OF INLET "H" (N)	DESCRIPTION	STATION
		CY	SQYD	LF	EA	EA	LF	EA	CY	EA	CY	EA	LB	EA	FT		
1	a	2.2	4.3													RSP	62.02' L+ "SR1" 377+37
	b				1											18" CONCRETE FES	62.02' L+ "SR1" 377+37
	c															18" RCP	35.98' R+ "SR1" 377+37 TO 62.02' L+ "SR1" 377+37
	d				1											18" CONCRETE FES	35.98' R+ "SR1" 377+37
	e															RSP	35.98' R+ "SR1" 377+37
	f						95									REMOVE CULVERT	35.98' R+ "SR1" 377+37 TO 62.02' L+ "SR1" 377+37
	g							1								REMOVE FES	35.98' R+ "SR1" 377+37
	h								54							UNLINED DITCH	32.96' R+ "SR1" 376+60 TO 31.60' R+ "SR1" 380+85
2	a	2.2	4.3													RSP	53.03' L+ "SR1" 387+04
	b				1											18" CONCRETE FES	53.03' L+ "SR1" 387+04
	c			85												18" RCP	27.83' R+ "SR1" 386+82 TO 53.03' L+ "SR1" 387+04
	d				1											18" CONCRETE FES	27.83' R+ "SR1" 386+82
	e	2.2	4.3													RSP	27.83' R+ "SR1" 386+82
	f						85									REMOVE CULVERT	27.83' R+ "SR1" 386+82 TO 53.03' L+ "SR1" 387+04
	g							1								REMOVE FES	27.83' R+ "SR1" 386+82
3	a	2.2	4.3													RSP	73.96' L+ "SR1" 389+42
	b				1											18" CONCRETE FES	73.96' L+ "SR1" 389+42
	c			109												18" RCP	35.18' R+ "SR1" 389+42 TO 73.96' L+ "SR1" 389+42
	d				1											18" CONCRETE FES	35.18' R+ "SR1" 389+42
	e	2.2	4.3													RSP	35.18' R+ "SR1" 389+42
	f						109									REMOVE CULVERT	35.18' R+ "SR1" 389+42 TO 73.96' L+ "SR1" 389+42
	g							1								REMOVE FES	35.18' R+ "SR1" 389+42
4	a	3.9	7.7													RSP	47.10' L+ "SR1" 553+04
	b					1										24" CONCRETE FES	47.10' L+ "SR1" 553+04
	c					1										24" CONCRETE FES	44.68' R+ "SR1" 553+01
	d	3.9	7.7													RSP	44.68' R+ "SR1" 553+01
	e							1								REMOVE FES	47.10' L+ "SR1" 553+04
	f							1								REMOVE FES	44.68' R+ "SR1" 553+01
5	a									1	1.5	1	263	1	5.1	G1 INLET W/ SIDE OPENING	43.95' L+ "SR1" 597+40
	b						5									REMOVE CULVERT (PORTION)	43.95' L+ "SR1" 597+47
	TOTAL	21	41.2	289	6	2	294	5	54	1	1.5	1	263	1	5.1		

Not in San Mateo County LCP

(N) - NOT A SEPARATE BID ITEM

DRAINAGE QUANTITIES

DQ-1

REVISED BY	DATE REVISED
.	.

CALCULATED-DESIGNED BY: KEVIN KRAMER
CHECKED BY: NELSON HOM
CONSULTANT FUNCTIONAL SUPERVISOR: SANG KIM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

LAST REVISION 10-27-23
DATE PLOTTED => 30-OCT-2023
TIME PLOTTED => 13:14

BORDER LAST REVISED 7/2/2010 | USERNAME => ernie.garnica | DGN FILE => 04180000053id001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0720 | PROJECT NUMBER & PHASE 04180000531

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8		

LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

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

LICENSED LANDSCAPE ARCHITECT CHRIS PADICK No. 6178 Signature 11-30-24 Renewal Date Date STATE OF CALIFORNIA

EROSION CONTROL TYPE 1

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE	DEPTH	REMARKS
		DESCRIPTION	TYPE			
STEP 1	HYDROSEED	SEED	MIX 1	40 LB/ACRE		
		FIBER	WOOD	2000 LB/ACRE		
STEP 2	HYDROMULCH	FIBER	WOOD	2000 LB/ACRE		
		TACKIFIER	PSYLLIUM	200 LB/ACRE		

EROSION CONTROL TYPE 2

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE	DEPTH	REMARKS
		DESCRIPTION	TYPE			
STEP 1	ROLLED EROSION CONTROL PRODUCT (NETTING)	100% WOVEN COIR (COCONUT FIBER)	A			
STEP 2	HYDROSEED	SEED	MIX 1	40 LB/ACRE		
		FIBER	WOOD	2000 LB/ACRE		
STEP 3	HYDROMULCH	FIBER	WOOD	2000 LB/ACRE		
		TACKIFIER	PSYLLIUM	200 LB/ACRE		

FIBER ROLLS

SEQUENCE	ITEM	MATERIAL		REMARKS
		DESCRIPTION	TYPE	
FIBER ROLLS MUST BE INSTALLED AFTER ROLLED EROSION CONTROL PRODUCT (NETTING) AND BEFORE HYDROSEEDING	FIBER ROLLS	RICE STRAW FILLED AND JUTE COVERED	8 TO 10 INCHES IN Dia	INSTALLATION TYPE 2

SEED MIX

SEED	BOTANICAL NAME	PERCENT GERMINATION	POUNDS PURE LIVE SEED PER ACRE
MIX 1	ACHILLEA MILLEFOLIUM (WHITE YARROW)	56	7
	BROMUS CARINATUS (CALIFORNIA BROME)	75	5
	ELYMUS GLAUCUS, BERKELEY (BLUE WILDRYE, BERKELEY)	56	5
	FESTUCA MICROSTACHYS (SMALL FESCUE)	53	6
	HORDEUM BRACHYANTHERUM (MEADOW BARLEY)	53	5
	STIPA PULCHRA (PURPLE NEEDLEGRASS)	55	6
	VULPIA MICROSTACHYS (SMALL FESCUE)	56	6

EROSION CONTROL LEGEND
ECL-1

LAST REVISION 10-27-23 | DATE PLOTTED => 10/27/2023 | TIME PLOTTED => 2:49:56 PM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | Caltrans | LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT: KIMBERLY WHITE

CALCULATED-DESIGNED BY: CHRIS PADICK | CHECKED BY: ALEX MCDONALD

REVISED BY | DATE REVISED | CP

BORDER LAST REVISED 9/8/2021 | USERNAME => | DGN FILE => ...\0418000053tc001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 0418000053

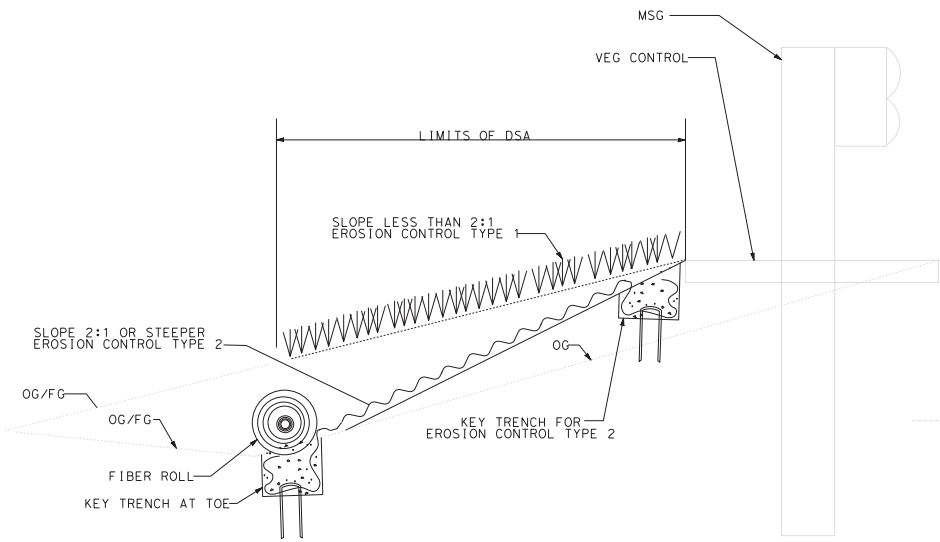
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8		

LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

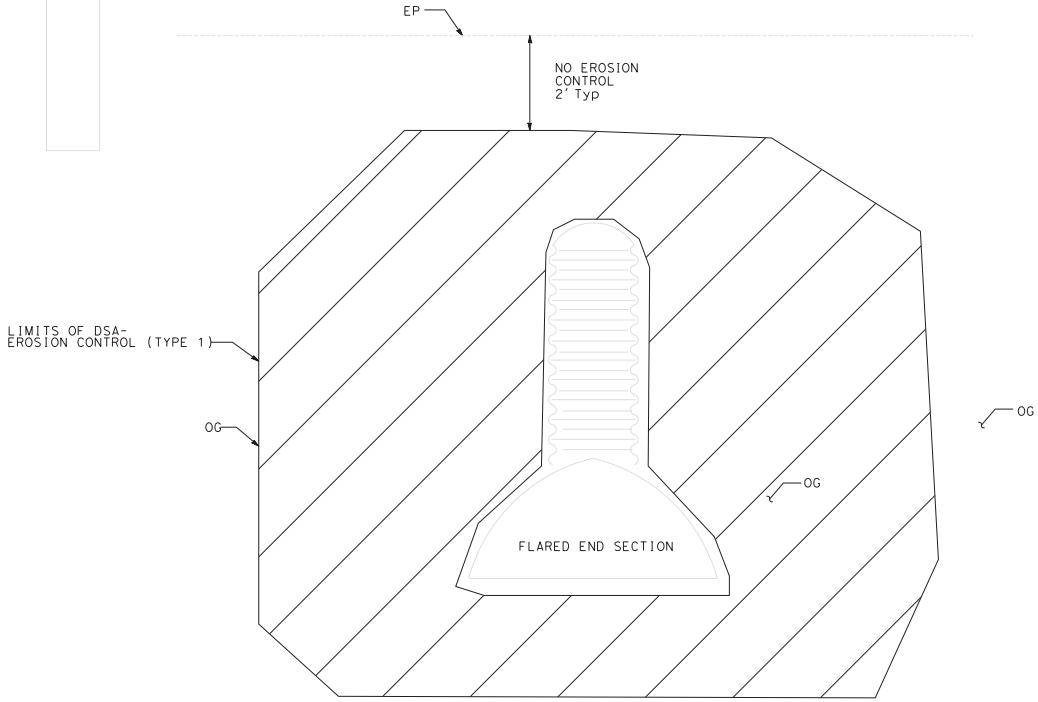
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LICENSED LANDSCAPE ARCHITECT
CHRIS PADICK No. 6735
Signature
11-30-24
Renewal date
Date
STATE OF CALIFORNIA



SECTION

EROSION CONTROL AT MGS



PLAN

EROSION CONTROL TYPE 1 AT FES-SLOPED AREAS LESS THAN 2:1

EROSION CONTROL DETAIL
ECD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® **LANDSCAPE ARCHITECTURE**

SENIOR LANDSCAPE ARCHITECT	CALCULATED-DESIGNED BY	CHRIS PADICK	REVISED BY	CP
KIMBERLY WHITE	CHECKED BY	ALEX MCDONALD	DATE REVISED	

LAST REVISION 10-12-23
DATE PLOTTED => 10/12/2023
TIME PLOTTED => 3:02:24 PM

BORDER LAST REVISED 9/8/2021 | USERNAME => | DGN FILE => ...\ecd-0418000053tf001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 0418000053

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8		

LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

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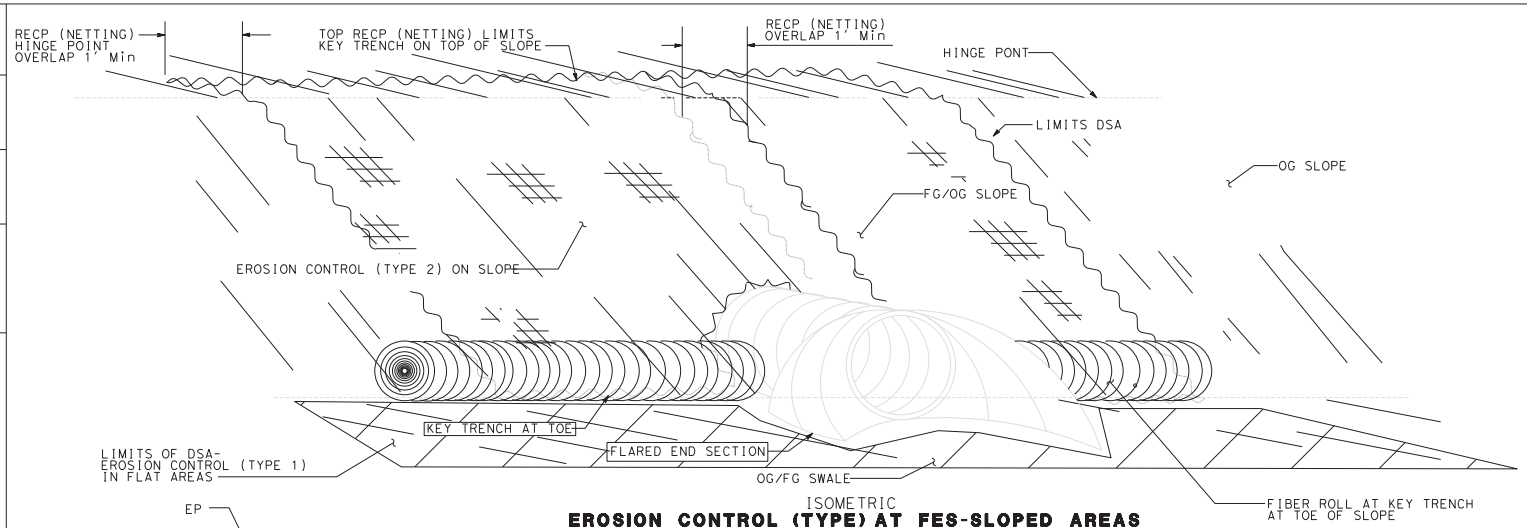
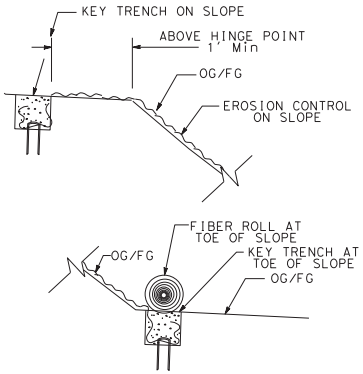
LICENSED LANDSCAPE ARCHITECT
CHRIS PADICK No. 6735
Signature
11-30-24
Renewal date
Date
STATE OF CALIFORNIA



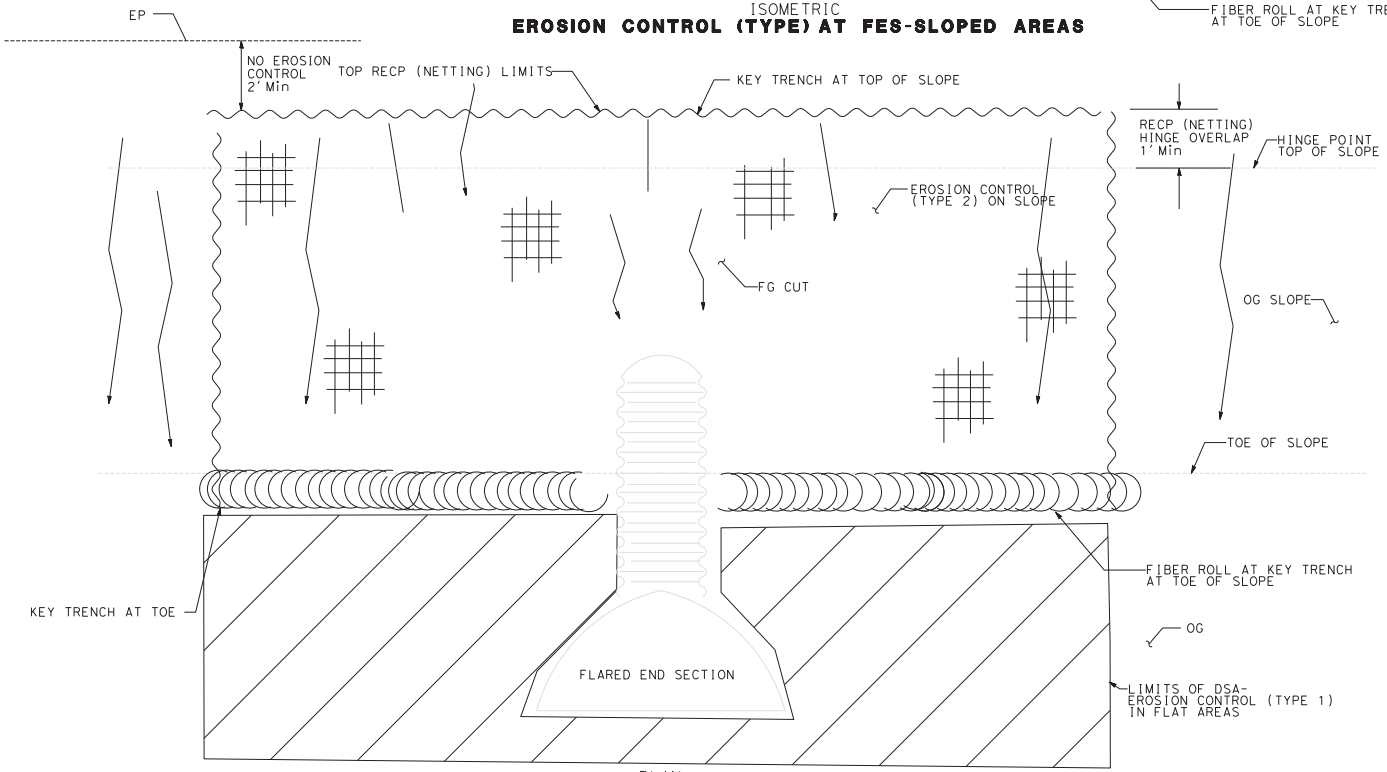
ISOMETRIC

EROSION CONTROL (TYPE) AT FES-SLOPED AREAS



ELEVATION

KEY TRENCH-SLOPED AREAS



PLAN

EROSION CONTROL (TYPE 2) AT FES-SLOPED AREAS

EROSION CONTROL DETAIL ECD-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	SENIOR LANDSCAPE ARCHITECT	CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
LANDSCAPE ARCHITECTURE	KIMBERLY WHITE	CHRIS PADICK	ALEX MCDONALD	CP	

LAST REVISION 10-12-23
DATE PLOTTED => 10/12/2023
TIME PLOTTED => 3:37:18 PM

BORDER LAST REVISED 9/8/2021 | USERNAME => | DGN FILE => ...\ecd-0418000053tf002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 0418000053

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	1	27.5/34.8		

LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

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

LICENSED LANDSCAPE ARCHITECT CHRIS PADICK No. 6735 Signature 11-30-24 Renewal Date Date STATE OF CALIFORNIA

EROSION CONTROL QUANTITIES

SHEET NO.	LOCATION		DESCRIPTION	ROLLED EROSION CONTROL PRODUCT (NETTING)	FIBER ROLLS	HYDROSEED	HYDROMULCH	HYDROSEED MATERIALS (N) MOVE-IN/ MOVE-OUT	HYDROSEED MATERIALS (N) MIX 1	HYDROSEED MATERIALS (N) FIBER	HYDROMULCH MATERIALS (N) FIBER	HYDROMULCH MATERIALS (N) TACKIFIER	REMARKS
				SQFT	LF	SQFT	SQFT	EA	LB	LB	LB	LB	
S-1	"SR1" LINE 376+60 380+85	R†	EC TYPE 1			2200	2200		2.03	101.2	101.2	10.12	FOR DRAINAGE SYSTEM 1-UNLINED DITCH
	"SR1" LINE 376+90 377+20	L†			20	200	200		0.18	9.2	9.2	0.92	FOR DRAINAGE SYSTEM 1-SEE EC DETAILS
	"SR1" LINE 376+90 377+20	R†	EC TYPE 2	200	20	200	200		0.18	9.2	9.2	0.92	
L-4	"SR1" LINE 381+30 387+00	L†	EC TYPE 1			600	600		0.55	27.6	27.6	2.76	SEE ECD-1 EROSION CONTROL AT MGS DETAIL
S-2	"SR1" LINE 386+80 387+10	R†	EC TYPE 2	200	20	200	200		0.18	9.2	9.2	0.92	FOR DRAINAGE SYSTEM 2-SEE EC DETAILS
	"SR1" LINE 386+95 387+15					200	200	1	0.18	9.2	9.2	0.92	
L-1	"SR1" LINE 387+75 388+90	L†	EC TYPE 1			600	600		0.55	27.6	27.6	2.76	SEE ECD-1 EROSION CONTROL AT MGS DETAIL
	"SR1" LINE 388+30 389+60					600	600		0.55	27.6	27.6	2.76	FOR DRAINAGE SYSTEM 3-SEE EC DETAILS
S-3	"SR1" LINE 388+30 389+60	R†	EC TYPE 2	600	20	600	600		0.55	27.6	27.6	2.76	
L-1	"SR1" LINE 390+85 393+60	L†				600	600		0.55	27.6	27.6	2.76	
L-5	"SR1" LINE 402+20 403+75	R†				400	400		0.37	18.4	18.4	1.84	
	"SR1" LINE 406+50 409+50	L†				600	600		0.55	27.6	27.6	2.76	
L-6	"SR1" LINE 409+50 410+00					100	100		0.14	4.6	4.6	0.46	
	"SR1" LINE 418+40 418+48	R†				300	300		0.27	13.8	13.8	1.38	
	"SR1" LINE 421+60 423+70	L†				300	300		0.27	13.8	13.8	1.38	
L-11	"SR1" LINE 484+30 488+15	R†	EC TYPE 1			400	400		0.37	18.4	18.4	1.84	
	"SR1" LINE 488+00 488+50	L†				100	100	1	0.09	4.6	4.6	0.46	
	"SR1" LINE 488+50 494+95					1,800	1,800		2.52	82.8	82.8	8.28	
L-10	"SR1" LINE 488+75 492+15	R†				900	900		1.26	41.4	41.4	4.14	
	"SR1" LINE 502+40 502+60	L†				100	100		0.56	18.4	18.4	1.84	SEE ECD-1 EROSION CONTROL AT MGS DETAIL
L-13	"SR1" LINE 502+50 504+00					450	450		0.42	20.7	20.7	2.07	
	"SR1" LINE 519+50 521+23	R†				400	400		0.37	18.4	18.4	1.84	
L-14	"SR1" LINE 528+35 530+08	L†	EC TYPE 2	400	20	400	400		0.37	18.4	18.4	1.84	
	"SR1" LINE 528+35 530+10	R†		400	20	400	400		0.37	18.4	18.4	1.84	
L-16	"SR1" LINE 546+05 547+90	L†				450	450		0.42	20.7	20.7	2.07	
	"SR1" LINE 546+15 548+00	R†				450	450		0.42	20.7	20.7	2.07	
D-3	"SR1" LINE 552+85 553+15					400	400	1	0.56	18.4	18.4	1.84	FOR DRAINAGE SYSTEM 4-SEE EC DETAILS
	"SR1" LINE 552+90 553+10	L†				400	400		0.37	18.4	18.4	1.84	
L-19	"SR1" LINE 592+60 594+70	R†	EC TYPE 1			450	450		0.42	20.7	20.7	2.07	SEE ECD-1 EROSION CONTROL AT MGS DETAIL
D-4	"SR1" LINE 597+40 597+60	L†				400	400		0.37	18.4	18.4	1.84	FOR DRAINAGE SYSTEM 5-SEE EC DETAILS
L-24	"SR1" LINE 653+05 654+95	R†				450	450		0.42	20.7	20.7	2.07	SEE ECD-1 EROSION CONTROL AT MGS DETAIL
	"SR1" LINE 653+15 654+20	L†				450	450		0.42	20.7	20.7	2.07	
			SUB-TOTAL	1,800	120	17,000	17,000	3					

Not in San Mateo County LCP

(N) - NOT A SEPARATE BID ITEM

EROSION CONTROL QUANTITIES ECQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
LANDSCAPE ARCHITECTURE
SENIOR LANDSCAPE ARCHITECT
KIMBERLY WHITE
CALCULATED-DESIGNED BY
CHECKED BY
CHRIS PADICK
ALEX MCDONALD
REVISED BY
DATE REVISED
CP

LAST REVISION
DATE PLOTTED => 10/12/2023
TIME PLOTTED => 3:44:51 PM
10-12-23

BORDER LAST REVISED 9/8/2021
USERNAME =>
DGN FILE => ...\ecq-0418000053tg001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 0418000053

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT F

State Route 1 Multi-Asset Roadway Rehabilitation Project

Supplemental Information
Coastal Development Permit Application
State Route 1 in San Mateo County Only
Prepared for San Mateo County Planning and Building

San Mateo County, California

04-SM-1 – 27.5/34.8

EA 04-0Q130/ID 04-1800-0053

December 2023

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

Supplemental Information
Coastal Development Permit Application
Prepared for San Mateo County Planning and Building

San Mateo County, California
04-SM-1 – 27.5/34.8
EA 04-0Q130/ID 04-1800-0053
December 2023

STATE OF CALIFORNIA
Department of Transportation

Prepared By: Broden Farazmand Date: 10/25/2023

Broden Farazmand, Environmental Planner
AECOM
300 Lakeside Drive, Oakland CA 94612

Reviewed By: _____ Date: 10/25/2023

Dillon Lennebacker, Environmental Planner
AECOM
300 Lakeside Drive, Oakland CA 94612

Approved By: _____ Date: _____

Zachary Gifford
510-506-1264
Office of Environmental Analysis
Caltrans District 4/ San Francisco San Mateo Counties

Table of Contents

List of Appendices

List of Tables

List of Figures

Acronyms List

ADA	Americans with Disabilities Act
AMMs	Avoidance and minimization measures
BA	Biological Assessment
BMPs	best management practices
BSA	biological study area
CAL FIRE	California Department of Forestry and Fire Protection
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CCC	Central California Coast
CCTV	closed-circuit television
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CE	Categorical Exclusion
CEQA	California Environmental Quality Act

CESA	California Endangered Species Act
CGP	Construction General Permit
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRLF	California red-legged frog
CWOS	Culverted Waters of the State
ESA	environmentally sensitive area
ESHAs	Environmentally Sensitive Habitat Areas
FHWA	Federal Highway Administration
ft	feet
LCP	Local Coastal Program
LCUP	San Mateo County Local Coastal Land Use Plan
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
OHWM	ordinary high water mark
OWOS	Other Waters of the State
PM	post mile
PRC	Public Resources Code
Project	State Route 1 Multi-Asset Roadway Rehabilitation Project
ROW	right of way
RWQCB	Regional Water Quality Control Board
SamTrans	San Mateo County Transit District
SR	State Route
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TMP	Traffic Management Plan
TMSs	traffic monitoring stations
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WDRS	Waste Discharge Requirements
WOTUS	Waters of the State
WPCP	Water Pollution Control Plan

Chapter 1: Supplemental Information Overview

The California Department of Transportation (Caltrans) is proposing the State Route (SR) 1 Multi-Asset Roadway Rehabilitation Project (Project) to rehabilitate existing pavement, improve existing traffic facilities, install Complete Streets elements, and install traffic operations system elements along SR 1 in San Mateo County, California. The Project also proposes to install traffic operation system elements at two locations on SR 92 in San Mateo County, California. The Project would include rehabilitating pavement; replacing existing drainage inlets, culverts, and dikes; replacing existing guardrails with Midwest guardrail systems; replacing existing crash cushions; upgrading curb ramps; implementing Complete Streets elements; upgrading signal poles; installing conduits; installing traffic operation system elements (intersection cameras, closed-circuit television cameras, and traffic monitoring stations); and relocating and/or replacing utility cabinets.

The development is a public works project that is partially in the Coastal Zone area that is governed by San Mateo County's Local Coastal Program (LCP) and Coastal Development Permit (CDP) jurisdiction.

This supplemental information was prepared in conjunction with a completed Planning Permit Application Form to the San Mateo County Department of Planning and Building in request for a CDP. The information provided here is intended to meet the CDP requirements and consistency with San Mateo County's Local Coastal Land Use Plan; General Plan; and Local Coastal Development Permit Ordinances (Section 18.20).

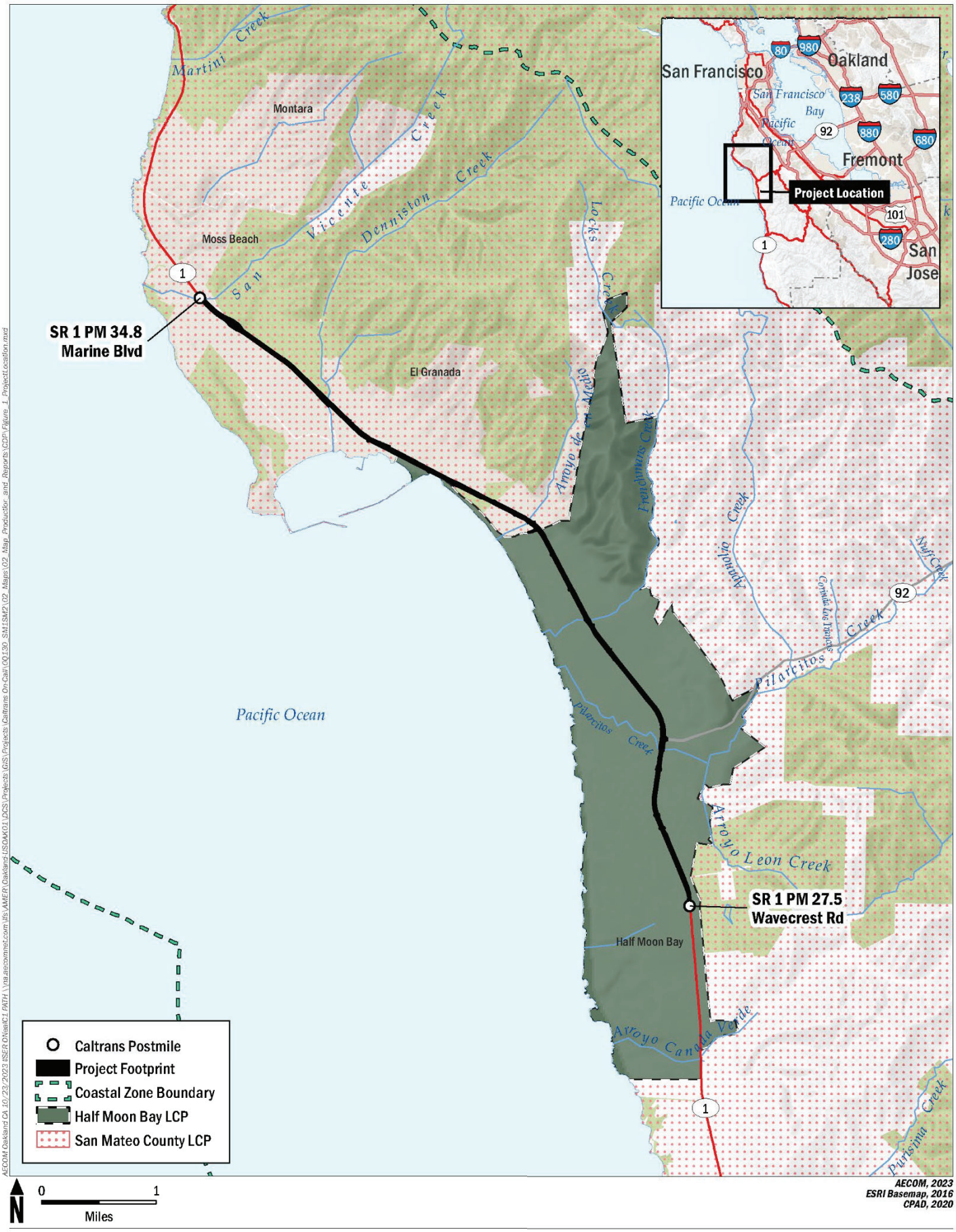
Chapter 2: Project Description

The Project would include pavement rehabilitation; replacing existing drainage inlets, culverts, and dikes; replacing existing guardrails with Midwest guardrail systems; replacing existing crash cushions; upgrading curb ramps; implementing complete street elements; upgrading signal poles; installing conduits; installing traffic operation system elements (intersection cameras, closed-circuit television (CCTV) cameras, and traffic monitoring stations [TMSs]); and relocating and/or replacing utility cabinets.

2.1 Project Location

The Project area is in San Mateo County, California. The Project area is on SR 1 between post mile (PM) 27.5 (SR 1 at Marine Boulevard) and PM 34.8 (SR 1 at Wavecrest Road); and SR 92 at PM 0.2 (at Main Street).

The project occurs within Coastal Zone and intersects the Coastal Zone Management Act authorities administered by the San Mateo County LCP, and the City of Half Moon Bay LCP. Figure 1 illustrates the project area, Coastal Zone jurisdiction, and LCP areas.



AECOM

Caltrans District 4

State Route 1 Multi-Asset Roadway Rehabilitation Project
San Mateo County, CA
PM 27.5/34.8
EA 04-0Q130 / Project ID 0418000053

FIGURE 1

Project Vicinity

2.2 Project Purpose

The Project would preserve and extend the life of the roadway to a condition that would require minimal maintenance expenditures, improve the ride quality, replace drainage systems, improve roadway safety, enhance pedestrian and bicycle access, and upgrade the traffic system infrastructure.

2.3 Project Need

The pavement on SR 1 in the Project area was evaluated in 2016 and is in poor condition overall (Caltrans 2016). Caltrans uses the International Roughness Index to evaluate and determine how smooth or rough a pavement surface is. The Federal Highway Administration (FHWA) International Roughness Index threshold for acceptable pavement surface is between 170 and 96, the threshold for good road surface is 95 or less, and surfaces that are greater than 170 do not meet the acceptable threshold. The stretch of Project highway pavement surface ranges from 100 to 226. If left untreated, this portion of SR 1 will continue to provide poor ride quality to users and will require frequent, expensive maintenance. Portions of the highway are near the acceptable roughness threshold, but continued pavement degradation is expected over time. In addition, existing highway elements and facilities in the Project area are worn out or functionally obsolete and need to be replaced. The current traffic systems (e.g., guard rails, crash cushions, and drainage) are approaching the ends of functional life and need to be upgraded.

“Complete Streets” is a Caltrans policy directive intended to provide safe mobility for all users, including bicyclists and pedestrians, and is a consideration during Project development. According to Director’s Policy 37, signed on December 7, 2021, it is Caltrans’ organizational priority to encourage and maximize walking, bicycling, transit, and passenger rail as a strategy to not only meet state climate, health, equity, and environmental goals but also to foster socially and economically vibrant, thriving, and resilient communities (Caltrans 2021). Therefore, the need to consider Complete Streets elements (e.g., curb ramps, sidewalks, and cross walks) is included in the Project design.

2.4 Project Elements

Caltrans is providing 95-percent design sheets that show project elements in detail in Appendix B. The subsections that follow summarize proposed Project activities.

2.4.1 Roadway Rehabilitation

Caltrans proposes a 20-year flexible rehabilitation pavement strategy to address poor pavement conditions. To rehabilitate the roadway, Caltrans would cold plane (mill the roadway surface down to design depths to restore and smooth the roadway conditions) 0.40 foot of existing asphalt concrete pavement, then replace it with a structural section composed of 0.20 foot of gap-graded rubberized hot-mix asphalt, a 0.25-foot hot-mix asphalt and geosynthetic pavement interlayer, and 0.10 foot of hot-mix asphalt. The roadway profile would be raised by about 0.15 foot at project completion. Pavement

rehabilitation would occur across the entire project location, and is shown in Appendices A and B.

2.4.2 Replace Existing Guardrails

Existing guardrails in the Project area would be removed and replaced with standard Midwest guardrail systems. Vegetation removal to access guardrails may be required, and relatively minor excavation would be necessary during construction to install wood posts. Wood support posts would be installed by post driver to an approximate depth of 4 feet below the ground.

2.4.3 Replace Existing Crash Cushions

Existing nonstandard or damaged crash cushions in the Project area would be replaced at the same locations with new crash cushions that meet current Caltrans standards for design and safety.

2.4.4 Upgrade Signal Poles

Nonstandard poles in the Project area would be replaced (Appendix B). Excavation would be required during replacement.

2.4.5 Install Conduits and Traffic Operation System Elements

Caltrans would upgrade and install new communication devices, such as CCTV cameras, fixed intersection cameras, and TMSs. New conduit installation to support these elements would require trenching during installation.

2.4.6 Road Shoulder Reworking

Caltrans would rework and pave approximately 2,500 linear feet of existing road shoulders to full depth structure at select locations split across the Project area to meet roadway design requirements.

2.4.7 Replace Existing Drainage Inlets, Culverts, and Dikes

Caltrans' hydraulic engineers have reviewed existing drainage elements and anticipate the following work within the SMC LCP area:

- Drainage System 4 (SR 1 at Medio Avenue; Culverted Water of the State [CWOS]-7; and Other Water of the State [OWOS]-03): Excavation of existing end section, and discharge of pre-cast concrete. Install two pre-cast concrete 18-inch diameter flared end sections.

As described above, the project will repair and replace existing drainage features in kind. No new drainage features will be added where they do not currently exist, no drainage features will be increased in size, and drainage patterns will not be altered. Appendix B shows locations and details of drainage improvements.

2.4.8 Bicycle and Pedestrian Improvements (Complete Streets Elements)

Sidewalks, curb ramps, and marking would be constructed throughout the Project area to provide access for pedestrians and cyclists. Locations where Complete Streets elements are proposed are shown in Appendix B. The following street elements would be included as part of the Project:

Mill and overlay of existing Multi-Modal Trail. Caltrans will remove cracked and damaged asphalt and resurface the existing Multi-Modal Class I Bike Trail to improve safety, access, and mobility for all travelers by making the ride smoother and safer.

Class 2 Bikeways. Caltrans will resurface and restripe the existing 12-foot-wide travel lanes and add Class II Bikeway striping (typically, 6 feet wide) with a 2-foot-wide buffer in the existing 8-foot-wide shoulder along the SR 1 corridor in both directions from Wavecrest Road to South of Marine Boulevard to improve bicycle facilities and connectivity within the project limits.

Curb Ramps and Sidewalk Improvements. Caltrans will upgrade existing curb ramps and sidewalks within the project limits at specific locations to meet current Americans with Disabilities Act (ADA) standards.

Locations within the City of Half Moon Bay's (City's) LCP area include Casa Del Mar Drive, Kelly Avenue, Filbert Street, Grove Street, Beach Avenue, Ruisseau Francais Avenue, Wave Avenue, Poplar Street, Seymour Street, and San Mateo Road. Locations in the San Mateo County LCP area include Capistrano Road and Coronado Street.

Connections to Existing Bus Stop Locations. Existing San Mateo Transit (SamTrans) bus stops at specific locations within the project limits will be updated meet current bus stop design standards by constructing additional landing areas.

These locations include the bus stops within the City's LCP area at Kehoe Avenue, Spindrift Way, Ruisseau Francais Avenue, and Roosevelt Boulevard. Bus stop locations within the San Mateo County LCP area include Mirada Road and Medeo Avenue.

Crosswalk Restriping. Caltrans will restripe crosswalks where SR 1 crosses the following streets in the City's LCP area: Seymour Street, Grove Street, Poplar Street, Filbert Street, Belleville Boulevard, Grand Boulevard, Kehoe Avenue, Frenchman's Creek Road, Young Avenue, and Frontage Road. Caltrans will also restripe the crosswalk at Alto Ave within the San Mateo County LCP area. Corner radii would be reduced, and curb ramps and/or path entrances will be squared up at these locations where appropriate.

2.4.9 Utility Relocation

Existing utilities would be relocated during construction as required. Utility relocations are identified in project plan sheets (Appendix B). Some utilities may require vegetation clearance and excavation during construction. Utility relocation is expected to remain within the Project footprint.

2.5 Transportation Management Plan for Use During Construction

Caltrans will develop a Project-specific Traffic Management Plan (TMP) during the final design phase of the Project. The TMP will be prepared in accordance with Caltrans requirements and guidelines to minimize construction-related delays and impacts on emergency vehicles and the traveling public. The TMP will include the following provisions:

- Coordination with San Mateo County, the City of Half Moon Bay, and any other applicable local jurisdictions for notification of closures and detours.
- Coordination with the California Highway Patrol and other local law enforcement.
- Use of portable changeable message signs, the California Highway Patrol construction zone enhanced enforcement program, one-way traffic controls, and flaggers.
- Continued access for emergency services.
- Continued access to any residential driveways.

2.6 Work Durations

Construction is due to begin in 2025. The Project is anticipated to be completed across two construction seasons. However, ground-disturbing work would occur and be restored on site within each work season for any work area. Construction activities may occur in both daytime and nighttime hours. Construction completion date is anticipated to be in the year 2026. The phasing and ordering of the different Project elements are expected to be refined further in later stages of design.

2.7 Equipment

Caltrans would use the following equipment for respective operations during construction of the Project:

1. **Roadway Rehabilitation (Cold plane Roadway and Intersection):** Cold plane milling machine, excavator, bulldozer, haul truck, compactor, roller, asphalt paver, and street sweeper
2. **Replace Existing Guardrails:** Guardrail post driver, truck, and forklift
3. **Replace signal poles and crash cushions**: Drilling machine, excavator, haul truck, concrete mixer truck, and bucket truck
4. **Road shoulder reworking:** Sawcut machine, excavator, haul truck, compactor, asphalt paver, roller, and street sweeper
5. **Replace existing drainage elements**: Excavator, haul truck, concrete mixer truck, and pipe placement machine

6. **Upgrade curb ramps and Complete Streets elements**: Jack hammer, loader, haul truck, and concrete mixer truck

7. **Installing temporary and permanent striping**: Paint line striping motorized machine, thermoplastic marking equipment, and attenuator crash truck

8. **Stage construction**: Construction area signs, portable changeable message signs, temporary railing (Type K)[1], alternative temporary crash cushions, cones, and attenuator crash truck

2.8 Site Cleanup and Restoration

All construction-related materials will be removed after completion of construction activities. Temporary staging areas would be cleaned up, and any remaining construction materials would be removed and hauled to an appropriate waste disposal facility. The project footprint would be contained primarily in paved areas and graveled/previously disturbed road shoulders. Vegetation restoration in-kind is anticipated where temporary impacts to existing vegetation would occur for construction access.

Caltrans will restore temporarily disturbed areas to their preconstruction contours and functions to the maximum extent practicable. Exposed slopes and bare ground will be reseeded with native local grasses and shrubs to stabilize and prevent erosion. Currently, the project does not propose to remove any trees; however, should the removal of trees be necessary for access in a work site, coordination with the appropriate permitting agency will be warranted, and planting may be required. A local hydroseed mix will be proposed in the plans, specifications, and estimates phase.

2.9 Project Construction

The details described in this section represent the most likely procedure for the construction of the Project. Construction procedures would continue to be refined during detailed design in coordination with regulatory agencies, if required. Although some details of construction would be left to the discretion of the contractor who is awarded the Project, every effort has been made to articulate Project details with the potential to affect the environment.

2.10 Avoidance and Minimization Measures

environmental commitments that are applicable to this project are provided below. Measures include:

- Caltrans project features. Project features are design elements and/or standard measures to reduce environmental effects which are employed on most, if not all, of Caltrans projects and were not developed in response to any specific environmental impact resulting from the Project. These measures are separated

[1] K-rails = Concrete k-rail barriers are commonly found on highways and high traffic prone areas. They are made for permanent or semi-permanent applications to serve multiple purposes such as security, traffic diversion, and blocking off access.

out from avoidance and minimization measures (AMMs) and Mitigation Measures, which directly relate to the impacts resulting from the Project.

- Environmental commitments provided in the final California Environmental Quality Act (CEQA) Initial Study; and

- Environmental commitments provided in the U.S. Fish and Wildlife Service (USFWS) Biological Assessment (BA)

Some measures in the tables are redundant. In instances where measures are redundant, Caltrans will implement the most conservative measure.

2.10.1 Project Features

Construction Site Best Management. The following site restrictions will be implemented to avoid or minimize potential effects on listed species and their habitats, pursuant to Caltrans Standard Specifications and Special Provisions.

- Speed Limit. Vehicles will not exceed 15 miles per hour in the project footprint to reduce dust and excessive soil disturbance.

- Trash Control. Food and food related trash items will be secured in sealed trash containers and removed from the site at the end of each day.

- Pets. Pets will be prohibited from entering the project limits during construction.

- Firearms. Firearms will be prohibited within the Project limits, except for those carried by authorized security personnel or local, state, or federal law enforcement officials.

Designated Construction Areas, Delineated Environmentally Sensitive Areas (ESAs), Work Areas, and Equipment and Materials Storage Sites. Caltrans will delineate construction areas and ESAs (areas containing sensitive habitats adjacent to or within the project limits for which physical disturbance is not allowed) on the final construction plans. The Agency-Approved biologist will be onsite to direct the installation of ESA fencing, flagging, or other approved means of delineation prior to the start of construction, to prevent encroachment of personnel and equipment into sensitive areas during construction. When feasible staging, storage, and parking areas will be in designated areas a minimum of 150 feet from the ordinary high water mark (OHWM) on paved or graveled surfaces within the Caltrans right of way (ROW) and away from any designated ESAs, to minimize construction impacts to protected resources. Equipment and materials storage sites will also be located as far away from residential uses as practicable. At the discretion of the Approved Biologist, limits will also be defined near other environmentally sensitive locations, such as bird nests, when necessary. The ESA fencing, flagging, or other material will be removed when construction activities are complete in the immediate vicinity. Erosion control materials that use plastic or synthetic monofilament netting will not be used in the project area.

Bird Protection Measures. To avoid take of migratory birds during the bird nesting season (February 1 to September 30), vegetation removal will only occur between October 1 and January 31 to the extent practicable. Vegetation trimming, or removal will not occur outside of the project footprint. Agency approved biologists will conduct preconstruction nesting bird surveys no more than three days prior to construction. If an active nest is discovered during construction, work within 50 feet of the nest of passerine species or 300 feet for raptor species will be avoided and an Approved Biologist will be contacted to investigate, upon inspection the Approved Biologists will identify the bird to species, establish an appropriate exclusion buffer around the nest, and implement protective measures during construction. The area within the buffer will be avoided and monitored until the young are no longer dependent on the adults or the nest is no longer active. If a nesting special-status bird species is discovered, an Approved Biologist will notify the USFWS and/or California Department of Fish and Wildlife (CDFW) for further guidance. Partially constructed and inactive nests will be removed to prevent occupation. Exclusion methods will be used to prevent migratory birds from nesting and roosting within the project area (February 1 to September 30).

Biologist Authority to Stop Construction. The Approved Biologist will stop work, as directed by the Resident Engineer, in the vicinity of any protected species that are discovered. Work will not begin again until the individual species is either relocated by the monitor or moves out of harm's way by itself.

Restoration/Revegetation of Disturbed Areas. Upon project completion, all temporarily disturbed previously vegetated areas will be contoured to preconstruction grades, where appropriate, and replanted with appropriate native vegetation as described in the revegetation plan.

Reduce Spread of Invasive Species. Noxious weeds will be controlled within the project construction site in accordance with Caltrans' Highway Design Manual Topic 110.5, "Control of Noxious Weeds – Exotic and Invasive Species," and Executive Order 13112 (Invasive Species), and by methods approved by a Caltrans' landscape architect or vegetation control specialist.

Avoidance of Entrapment. To prevent inadvertent entrapment of animals during construction, excavated, steep-walled holes or trenches more than 1 foot deep will be covered at the close of each working day using plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Pipes, culverts, or similar structures stored in the project limits overnight will be inspected before they are subsequently moved, capped, and/or buried.

Temporary Lighting During Construction. All construction lighting will be limited to within the area of work. Should nighttime work be necessary, all lighting will be directed downwards and towards active construction areas. When nighttime work cannot be avoided, disturbance of listed species will be avoided and minimized by restricting substantial use of temporary lighting to the least sensitive seasonal and meteorological windows. Lights on work areas will be shielded and focused to minimize lighting of

listed-species habitat. Construction personnel will turn portable tower lights on no more than 30 minutes before the beginning of civil twilight, and off no more than 30 minutes after the end of civil sunrise. Lighting per portable tower light will not exceed 2,000 lumens.

Discovery of Cultural Resources. If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a Caltrans qualified archaeologist can assess the nature and significance of the find.

Discovery of Human Remains. If remains are discovered during excavation, all work within 60 feet of the discovery will halt and Caltrans' Cultural Resource Studies office will be called. Caltrans' Cultural Resources Studies Office Staff will assess the remains and, if determined human, will contact the County Coroner as per Public Resources Code (PRC) Sections 5097.98, 5097.99, and 7050.5 of the California Health and Safety Code. If the Coroner determines the remains to be Native American, the Coroner will contact the Native American Heritage Commission who will then assign and notify a Most Likely Descendant. Caltrans will consult with the Most Likely Descendant on respectful treatment and reburial of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Maintaining Internal Combustion Engines. All internal combustion engines will be maintained properly to minimize noise generation.

Idling of Internal Combustion Engines. Unnecessary idling of internal combustion engines will be avoided within 100 feet of sensitive receptors.

Traffic Management Plan (TMP). A TMP will be developed by Caltrans. The TMP will include elements such as haul routes, one-way traffic controls to minimize speeds and congestion, flag workers, and phasing, to reduce impacts to residents as feasible and maintain access for police, fire, and medical services in the local area. Temporary pedestrian and bicyclist access will be provided during construction.

Visual Integrity. To maintain the visual integrity of the area the following measures will be implemented on site:

- All disturbed ground surfaces shall be restored and treated with erosion control.
- Existing Vegetation shall be preserved to the maximum extent feasible.
- All other impacted vegetation shall be evaluated for replacement. Depending on the extent of removal, a one-year plant establishment period may be required.
- During Construction operations, unsightly material and equipment in staging areas shall be placed where they are less visible and/or covered when possible.

Water Quality Best Management Practices (BMPs): The contractor will adhere to the instructions, protocols, and specifications, outlined in the most current Caltrans

Construction Site Best Management Practices Manual and Caltrans Standard Specifications. At a minimum, protective measures will include the following:

- Disallowing discharging of pollutants from vehicle and equipment cleaning into storm drains or watercourses.
- Storing or servicing vehicles and construction equipment including fueling, cleaning and maintenance at least 50 feet from aquatic habitat unless separated by a topographic or drainage barrier.
- Maintaining equipment to prevent the leakage of vehicle fluids such as gasoline, oils, or solvents and developing a spill response plan. Hazardous materials such as fuels, oils, solvents, etc. will be stored in sealable containers in a designated location that is at least 50 feet from aquatic habitats.
- Collecting and disposing of concrete wastes and water from curing operations in appropriate washouts located at least 50 feet from watercourses.
- Covering temporary stockpiles.
- Installing coir rolls or straw wattles along or at the base of slopes during construction to capture sediment.
- Protecting graded areas from erosion using a combination of silt fences, fiber rolls, and erosion control netting (jute or coir) as appropriate.

2.10.2 Project Specific Avoidance and Minimization Measures

2.10.2.1 General Conservation Measures

Worker Environmental Awareness Training: Construction personnel will attend a mandatory environmental education program delivered by the USFWS-Approved Biological Monitor prior to taking part in site construction, including fence installation and other ground-disturbing and/or vegetation clearing activities. The program will focus on the conservation measures that are relevant to an employee's personal responsibility and will include an explanation of how to best avoid take of listed species. At a minimum, the training will include a description of the listed species that may occur on site; how they might be encountered in the project construction zone; their status and protection; and the relevant Conservation Measures and Terms and Conditions of the Biological Opinion. A fact sheet conveying this information will be prepared and distributed to all construction and project personnel. Distributed materials will include cards with distinctive photographs of the species, compliance reminders, and relevant contact information. Documentation of the training, including sign-in sheets, will be kept on file and made available to the USFWS on request.

Environmentally Sensitive Area Fencing: Prior to the start of construction, environmentally sensitive areas (defined as areas containing sensitive habitats adjacent to or in construction work areas for which physical disturbance is not allowed) will be clearly delineated using temporary high-visibility fencing or temporary reinforced silt

fences with high-visibility fabric on top (Type 1). Construction work areas will include the active construction site and all areas providing support for the project, including areas used for vehicle parking, equipment and material storage and staging, and access roads. The fencing will remain in place throughout the duration of construction activities, be inspected regularly, and be fully maintained at all times. The final project plans will show all locations where the fencing will be installed, and will provide installation specifications. The bid solicitation package special provisions will clearly describe acceptable fencing material and prohibited construction-related activities, including vehicle operation, material and equipment storage, access roads, and other surface-disturbing activities in ESAs.

Inclement Weather Restriction: No work would occur during or within 24 hours following a rain event exceeding 0.2 inch, as forecast by the National Oceanic and Atmospheric Administration National Weather Service for Half Moon Bay, California (C3295) base station. USFWS/approval to continue work during or within 24 hours of a rain event will be considered on a case-by-case basis.

Staging: Staging and parking areas will be restricted to designated areas, as specified by the project biologist in coordination with the project engineer.

Soil Storage: Imported soil or native topsoil may be stored in a designated location, as specified by the project biologist in coordination with the project engineer, until project completion.

Vegetation Removal: Vegetation removal will be limited to the designated work areas needed for access and workspace. Where possible, vegetation removal in temporary work areas will be cut above soil level to promote vegetative growth of established plants following construction.

Replant, Reseed, and Restore Disturbed Areas: Caltrans will restore temporarily disturbed areas to their preconstruction contours and functions to the maximum extent practicable. Exposed slopes and bare ground will be reseeded with native local grasses and shrubs to stabilize and prevent erosion. Where disturbance includes the removal of trees and woody shrubs, coordination with the appropriate permitting agency will be warranted, and planting may be required. A local hydroseed mix will be proposed in the plans, specifications, and estimates phase.

Migratory Bird Treaty Act: To minimize and avoid take of birds protected under the Migratory Bird Treaty Act, their nests, and their young, Caltrans will conduct vegetation and tree trimming from October 1 through January 31—before project construction—when possible. This work will be limited to vegetation and trees that are within the project footprint. No grubbing or other ground-disturbing work will occur at this time. On completion of vegetation and tree trimming, Caltrans will install stormwater and erosion control BMPs. During the nesting season (February 15 through September 30), a qualified biologist with appropriate construction and species experience will conduct nest and bird surveys and other wildlife surveys prior to tree removal and applicable pruning. All work will be conducted under an RWQCB-approved Water Pollution Control

Plan or Storm Water Pollution Protection Plan. During the nesting season, pre-construction surveys for nesting birds will be conducted by a qualified biologist no more than 72 hours prior to the start of construction activities. If work is to occur within 300 feet of active raptor nests or 50 feet of active other migratory/nongame bird nests, a no-disturbance buffer will be established at a distance sufficient to minimize disturbance, based on the nest location, topography, cover, the species' sensitivity to disturbance, and the intensity/type of potential disturbance. All clearing and grubbing of woody vegetation will be performed by hand or using light construction equipment, such as backhoes and excavators.

Pre-Construction Surveys: Prior to initiation of construction activities that include ground disturbance (including fence installation), pre-construction surveys for special-status plants and animals will be conducted by a biologist/botanist. A USFWS-approved biologist will be required for listed plant and animal species. These surveys will consist of walking the project footprint and adjacent areas that are accessible by foot; the use of binoculars or spotting scopes may be required. The biologist will investigate mammal burrows (for California red-legged frog [CRLF] or other special-status wildlife).

Invasive Species Management: To reduce the spread of invasive nonnative plant species and minimize the potential decrease of palatable vegetation for wildlife species, Caltrans will comply with Executive Order 13112. The purpose of this order is to prevent the introduction of invasive species and provide for their control to minimize economic, ecological, and human health impacts. In the event that high- or medium-priority noxious weeds, as defined by the California Department of Food and Agriculture or the California Invasive Plant Council (Cal-IPC), are disturbed or removed during construction-related activities, the contractor will contain the plant material associated with these noxious weeds and will dispose of it in a manner that will not promote the spread of the species. The contractor will be responsible for obtaining all permits, licenses, and environmental clearances for properly disposing materials. Areas subject to noxious weed removal or disturbance will be replanted with fast-growing native grasses or a native erosion control seed mixture. If seeding is not possible, the area will be covered to the extent practicable with heavy black plastic solarization material until completion of construction. All earthmoving equipment, as well as seeding equipment to be used during project construction, will be thoroughly cleaned before arriving on the project site.

Implementation of Water Quality/Erosion Control BMPs: Erosion control BMPs will be developed and implemented to minimize any wind- or water-related erosion, in compliance with the requirements of the RWQCB. Protective measures will include, at a minimum, the following:

- No discharge of pollutants from vehicle and equipment cleaning will be allowed into any storm drains or watercourses.

- Vehicle and equipment fueling and maintenance operations will be kept at least 50 feet away from watercourses, except at established commercial gas stations or established vehicle maintenance facilities.

- Concrete wastes will be collected in washouts, and water from curing operations will be collected and disposed. Neither will be allowed into watercourses.

- Spill containment kits will be maintained on site at all times during construction operations and/or staging or fueling of equipment.

- Dust control measures will include use of water trucks and dust palliatives to control dust in excavation-and-fill areas; covering temporary access road entrances and exits with rock (rocking); and covering temporary stockpiles when weather conditions require.

- Coir rolls or straw wattles that do not contain plastic or synthetic monofilament netting will be installed along or at the base of slopes during construction to capture sediment.

- Graded areas will be protected from erosion using a combination of silt fences and fiber rolls along toes of slopes or along edges of designated staging areas; erosion control netting (e.g., jute or coir) will be used as appropriate on sloped areas. Erosion control materials that use plastic or synthetic monofilament netting will not be used in the project footprint. This will include products that use photodegradable or biodegradable synthetic netting, which can take several months to decompose. Acceptable materials will include natural fibers, such as jute, coconut, or twine.

Construction Site BMPs: The following site restrictions will be implemented to avoid or minimize impacts on special-status species and their habitats:

- Routes and boundaries of roadwork will be clearly marked before the start of construction or grading.

- All food and food-related trash items will be enclosed in sealed trash containers and will be properly disposed off site.

- No pets belonging to project personnel will be allowed anywhere in the project area during construction.

- No firearms carried by project personnel will be allowed except for those carried by authorized security personnel or local, state, or federal law enforcement officials.

- A spill response plan will be prepared. Hazardous materials (e.g., fuels, oils, or solvents) will be stored in sealable containers in a designated location at least 50 feet from any aquatic features.

Speed Reduction: Project-related vehicles will be required to observe a 10-mile-per-hour speed limit in all staging or storage areas.

Light Restrictions: Construction personnel will turn portable tower lights on no more than 30 minutes before the beginning of civil twilight, and off no more than 30 minutes after the end of civil sunrise. Portable tower lights will have directional shields attached to them, and personnel will only direct lights downward and toward active construction and staging areas. Lighting per portable tower light will not exceed 2,000 lumens. To the extent practicable, personnel will only use enough coverage to light the work areas.

2.10.2.2 Construction Measures

Wetlands and Waters Construction Work Windows: Work in wetlands, waters, and riparian habitat will be limited to June 15 through October 15 to avoid or minimize impacts to WOTUS, Waters of the State, riparian habitat, and special-status species habitat.

Environmentally Sensitive Areas and Fencing: Listed species habitat will be delineated as environmentally sensitive areas on contract plans and defined in contract specifications.

Environmentally sensitive areas outside of the proposed work areas will be specifically identified to avoid during construction. Where work must occur in or adjacent to an environmentally sensitive area, an approved biologist with stop-work authority will be present. Caltrans will install fencing to outline and protect environmentally sensitive areas prior to the start of construction. Environmentally sensitive area provisions will be implemented as a first order of work, and will remain in place until all construction activities are completed in the work area.

Riparian Vegetation Protection: All riparian habitat in the project area will be delineated as an environmentally sensitive area, and no construction activities will occur outside of the immediate work area in riparian habitat. At the roadway crossings of Denniston, Frenchman's, Arroyo de en Medio Creek, and Pilarcitos Creeks, Caltrans will limit riparian vegetation removal to the immediate work area. Trees or shrub trimming at those locations will be limited to removing only branches that overhang the roadway.

2.10.2.3 Species-Specific Conservation Measures – California Red-Legged Frog and San Francisco Garter Snake

Seasonal Avoidance: Construction activities off paved surfaces in areas of potential CRLF habitat will be performed between June 15 and October 15 to minimize impacts on this species. Designated staging areas may be used outside of this work window once cleared by a USFWS-Approved Biologist or their designee, and fenced, as appropriate.

Exclude Use of Plastic/Synthetic Monofilament Netting: To avoid entanglement or injury of CRLF or San Francisco garter snake, erosion control materials that use plastic or synthetic monofilament netting will not be used.

Avoidance of Entrapment: To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 1 foot deep will

be covered at the close of each working day with plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks at an angle no greater than 30 degrees. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. All replacement pipes, hoses, culverts, or similar structures less than 12 inches in diameter will be closed, capped, or covered on entry to the project site. All similar structures greater than 12 inches must be inspected before they are subsequently moved, capped, and/or buried.

Biological Monitor: The names and qualifications of proposed biological monitor(s) will be submitted to the USFWS for approval prior to the start of construction. The USFWS-approved biological monitor(s) will keep a copy of the USFWS biological opinion in their possession when on site. Through communication with the resident engineer, the USFWS-approved biological monitor(s) will be on site during all work that could reasonably result in take of CRLF or other special-status species. The USFWS-approved biological monitor(s) will have the authority to stop work that may result in the unauthorized take of special-status species. If the USFWS-approved biological monitor exercises this authority, the USFWS will be notified by telephone and e-mail message within 1 working day.

Pre-Construction/Daily Surveys: Pre-construction surveys for special-status species will be conducted by the USFWS-approved biological monitor no more than 14 calendar days prior to any initial ground disturbance, and immediately prior to ground-disturbing activities (including vegetation removal and fence installation) in the project footprint. These efforts will consist of walking surveys of the project limits, and if possible, accessible adjacent areas within at least 50 feet of the project limits. The USFWS-approved biological monitor will investigate potential cover sites when it is feasible and safe to do so. This includes thorough investigation of mammal burrows, rocky outcrops, appropriately sized soil cracks, tree cavities, and debris. Native vertebrates found in the cover sites within the project limits will be documented and relocated to an adequate cover site in the vicinity, with the exception of fully protected species. Safety permitting, the USFWS-approved biological monitor will also survey areas of disturbed soil for signs of CRLF or San Francisco garter snake within 30 minutes following initial disturbance of the given area. The need for further pre-construction surveys will be determined by the Biologist based on site conditions and realized construction timelines.

Protocol for Species Observation: The USFWS-approved biological monitor(s) will have the authority to halt work through coordination with the resident engineer if CRLF or San Francisco garter snake are observed in the project footprint. The resident engineer will keep construction activities suspended in a 50-foot radius of the California red-legged frog or San Francisco garter snake in any construction area where the biologist has determined that a potential take of the species could occur. Work will resume after observed listed individuals leave the site voluntarily, the biologist determines that no wildlife is being harassed or harmed by construction activities, or the wildlife is relocated by the biologist to a release site using USFWS-approved handling techniques.

Handling of California Red-Legged Frog: If a CRLF individual(s) is discovered, the resident engineer and USFWS-approved biological monitor will be immediately informed.

- If a CRLF gains access to a construction zone, work will be halted immediately within 50 feet until the animal leaves the site or is captured and relocated by the USFWS-approved biological monitor.

- The USFWS will be notified within 1 working day if a CRLF or San Francisco garter snake is discovered in the construction site.

- The captured CRLF will be released in appropriate habitat outside of the construction area but near the capture location. The release habitat will be determined by the USFWS-approved biological monitor.

- The USFWS-approved biological monitor will take precautions to prevent introduction of amphibian diseases in accordance with the Revised Guidance on Site Assessments and Field Surveys for the CRLF (USFWS 2005).

Chapter 3: Land Use

Land uses in the Project area include residential, recreational, and commercial. The California Coastal Trail generally runs parallel to SR 1 in the Project area and accommodates pedestrians, bicyclists, equestrians, and others. In addition, multiple publicly accessible open space and beach areas are adjacent to the Project area, including Wavecrest Open Space, Venice State Beach, Miramar Beach, Surfers Beach, Mavericks Beach, and Pillar Point Bluff. The Project would be constructed within Caltrans Right-of-Way, and would not alter existing or future land uses. Access along SR 1 and SR 92 would be managed and maintained during construction, with the exception of temporary lane closures and detours. Temporary impacts on traffic would be minimized by implementation of the Project's TMP, as discussed in Section 2.5.

San Mateo County's Local Coastal Land Use Plan (LCUP) (San Mateo County 2013a) Midcoast Land Use Map (San Mateo County 2013b) indicates that the project occurs adjacent to lands designated as residential, recreation, open space, commercial, and airport. It also crosses through an area designated as linear park and trail plan overlay, which relates to the original Devil's Slide Bypass Alignment.

Chapter 4: Biological Resource Evaluation

Caltrans prepared the *San Mateo State Route 1 Multi-Asset Roadway Rehabilitation Project Natural Environment Study* (NES) for the Project that reviewed the existing environmental setting, identified potential habitats and species of special concern, and provided a preliminary environmental impact analysis from the Project on biological resources (Appendix C). Additionally, Caltrans, as the federal lead agency under National Environmental Policy Act (NEPA), has initiated consultation with the USFWS for threatened and endangered species regulated pursuant to section 7 of the federal Endangered Species Act. The BA prepared for the project is included with this supplemental information as Appendix D. Caltrans believes that the attached NES and information summarized here and in the impact analysis in Chapter 6: of this Supplemental Information document satisfy Coastal Act and the San Mateo County's LCP requirement for a Biological Resource Evaluation.

The Project occurs within an area characterized by diverse wildlife, vegetation, and intermittent riparian habitat. Sensitive communities in the BSA include wetlands, riparian areas, and upland areas that could provide dispersal habitat to special status species (i.e., CRLF and San Francisco garter snake). The riparian areas at the creek crossings in the BSA support a vegetation type dominated by tall red alder (*Alnus rubra*) trees, and dense arroyo willow (*Salix lasiolepis*) and red willow (*Salix laevigata*) stands.

A table listing the special-status species and habitats reviewed for potential to occur inside the project's biological study area (BSA) is provided in the NES (Appendix C).

4.1 Natural Environment Study

Caltrans prepared an analysis of project-related effects on special status species is summarized in the NES. The NES was completed during the conceptual design phase, and project impacts presented in it were conservative estimates that have been substantially reduced during the design phase. Therefore, impact quantities presented in the NES are not current and do not reflect the avoidance measures implemented during the Project's design phase. Baseline conditions identified in the NES remain relevant, and project impacts have been substantially reduced and are updated in this and other project permit applications. The NES identifies all species with potential to occur within the Project's BSA, and provides a further analysis for species with potential to be impacted by Project activities.

Data sources consulted to identify special-status species in the project area included the California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants of California, USFWS online Information for Planning and Consultation Report, USFWS designated Critical Habitat Mapper, National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) West Coast Region online tools for identifying endangered and threatened species and critical habitat in California, Passage Assessment Database, and the Center for Ecosystem Management and Restoration's Steelhead/Rainbow Trout Resources South of the Golden Gate, California.

Additionally, general, reconnaissance-level surveys were conducted in the BSA for plant communities, wildlife habitats, and general site-specific information to support evaluation of biological resources. More targeted surveys, including an aquatic resource delineation survey and vegetation mapping were also performed, in addition to multiple focused botanical surveys.

4.2 USFWS Biological Assessment

Caltrans prepared an analysis of project-related effects on species managed by the USFWS in the *State Route 1 Multi-Asset Roadway Rehabilitation Project Biological Assessment* (Appendix D). The analysis concluded that the Project may affect and is likely to adversely affect the CRLF and the San Francisco garter snake. Caltrans is seeking a Biological Opinion from USFWS, and consultation with USFWS is therefore ongoing.

4.3 Special Status Species with Potential to be Impacted by the Project

Caltrans identified the following special status species and their habitat as having potential to occur and be impacted by the Project:

- CRLF (*Rana draytonii*) – federally threatened; State species of special concern.
- San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) – federally endangered; State endangered; State fully protected

Although forested riparian habitat with grass and herbaceous plant species are present in the understory of riparian areas, based on botanical surveys of the project sites, special-status plant species with potential to occur at the site were not found. No special-status plants are expected to be impacted by the project.

Chapter 5: Existing Coastal Act Jurisdictional Areas and ESHAs within the BSA

The Project occurs across areas regulated under the San Mateo County LCP and the City of Half Moon Bay LCP. This section summarizes baseline conditions for Coastal Act jurisdictional areas and ESHAs that occur within the San Mateo County LCP only. A separate CDP request with Half Moon Bay for areas within the area of their LCP authority is being submitted concurrent to this request.

Environmentally Sensitive Habitat Areas (ESHAs) are defined as any area in which plant or animal life or their habitats are either rare or especially valuable because of their nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments (Coastal Act Section 30107.5). All waters and riparian areas mapped within the project area are considered ESHAs.

5.1 Coastal Waters, wetlands and riparian areas

“Wetland” is defined as lands within the Coastal Zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens (Coastal Act Section 30121).

The California Coastal Act regulations establish a wetland definition that requires evidence of only one of the three parameters (hydrophytic vegetation, hydric soils, or wetland hydrology) to establish wetland conditions (California Coastal Commission 2011).

San Mateo County defines riparian corridors in its LCP by the ““limit of riparian vegetation” (i.e., a line determined by the association of plant and animal species normally found near streams, lakes and other bodies of freshwater: red alder, jaumea, pickleweed, big leaf maple, narrow-leaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder). Such a corridor must contain at least a 50% cover of some combination of the plants listed (San Mateo County 2013a).

Table 5-1 summarizes baseline conditions and that most of these features observed in the study area are not anticipated to be affected by the Project. A discussion on project impacts to ESHAs is provided in Section 6.1.

Table 5-1. Coastal Jurisdictional Waters and Riparian Habitat identified Within the Project Area and San Mateo County LCP area.

Type	Area (acres)
Culverted Waters	0.07
Wetlands	0.01
Other Waters	0.44
Coastal Riparian Habitat	3.70
Total	**4.20**

Note:

LCP = Local Coastal Program

5.2 Special Status Species Habitat

In addition to waters and riparian areas, potentially suitable CRLF and San Francisco garter snake habitat has been delineated within the study area. Areas of non-breeding aquatic habitat generally conform to the coastal jurisdictional waters and riparian habitat described in Section 5.1 above. Additionally, potential upland habitats that could be used for species dispersal were identified in the NES and refined in coordination with USFWS as presented in the project's USFWS BA. San Francisco garter snake and CRLF habitats are included here as ESHAs. Table 5-2 lists the habitat quantity in acres for the project area in San Mateo County.

Please note that Table 5-2 summarizes baseline conditions and that most of these features observed in the study area are not anticipated to be affected by the Project. A discussion on project impacts to ESHAs is provided in Section 6.1

Table 5-2. California Red-Legged Frog and San Francisco Garter Snake Habitat within the Project BSA and San Mateo County LCP.

Habitat Type	Habitat Quantity (acres)
*Non-breeding aquatic habitat	0.11
*Upland Dispersal Habitat	15.35
Total	15.46

* Aquatic habitat and upland habitat in riparian corridors are already considered ESHA's because they are also coastal waters and riparian areas. Values presented here are not to be summed with those areas as it would double count these habitat features.

Note:
BSA = biological study area
ESHA = Environmentally Sensitive Habitat Area
LCP = Local Coastal Program

5.3 Other Habitats

Landscaped and ruderal vegetation are present in the BSA, including ornamental shrubs and trees planted in the SR 1 shoulders for aesthetic purposes. Additionally, there are habitat areas that consist of ruderal weeds and grasses adjacent to SR 1.

Chapter 6: Project Impacts

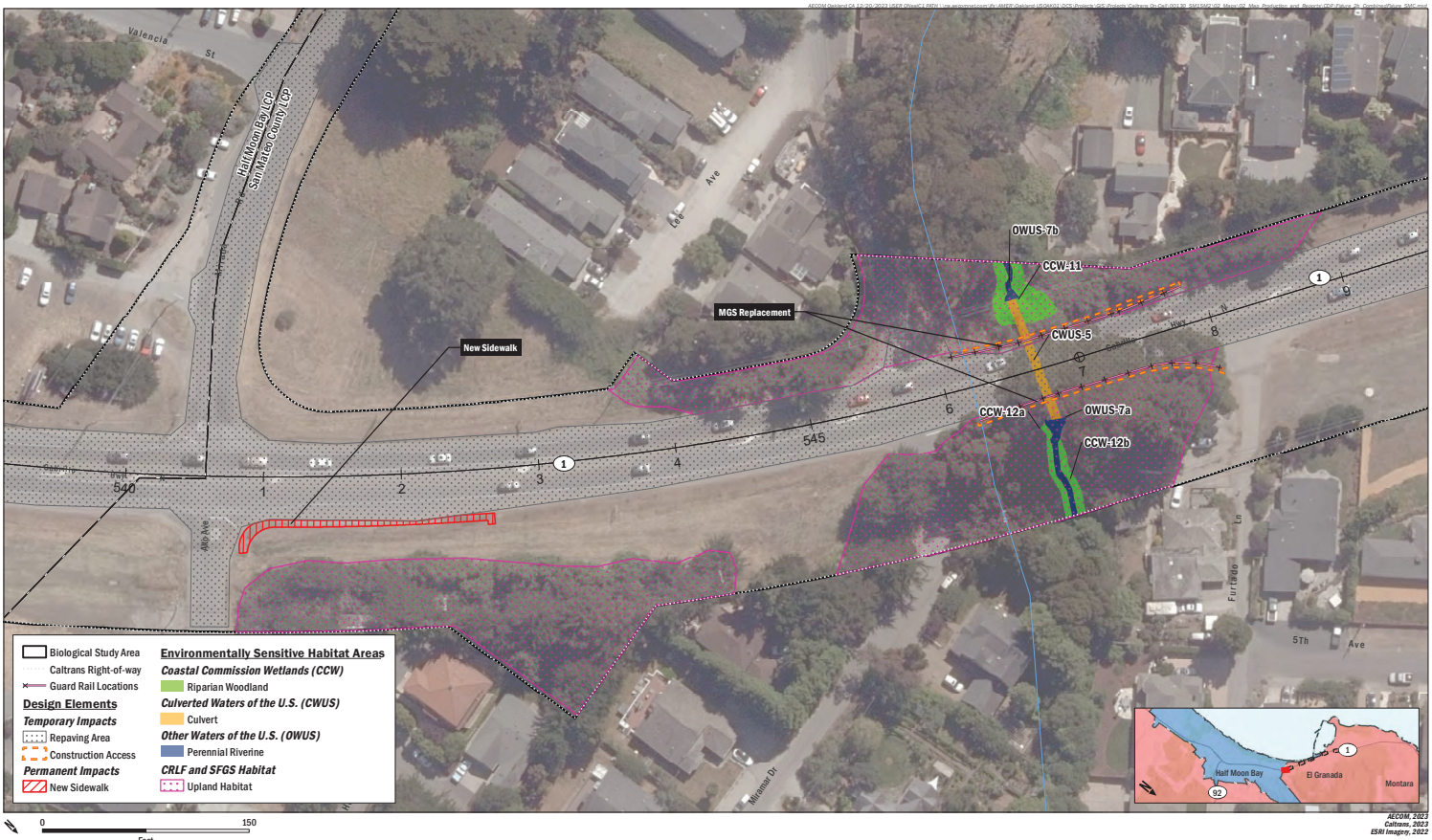
6.1 ESHAs

The Project is anticipated to have relatively limited temporary impacts, and no permanent impacts on ESHAs. Figure 2 describes project elements within ESHAs that would have impacts during project construction. Table 6-1 summarizes the temporary impacts to the following resources: Special status species habitat (i.e., potentially suitable upland dispersal habitat for the CRLF and San Francisco garter snake); one culverted water of the State; and small areas where special status species habitat area and wetlands overlap. The Project is anticipated to have no impacts on WOTUS, as regulated by Sections 401 and 404 of the Clean Water Act. Additionally, no tree removal is proposed by the project.

Table 6-1. Potential Project Effects on ESHAs

Habitat Type	Temporary Disturbance Area (acres)
SSS Upland Habitat	0.08
Culverted Waters of the State	<0.01
Overlap of SSS and Wetland Habitat	<0.01
Total	**0.08**

Notes:
ESHAs are shown in Appendix A
ESHA = Environmentally Sensitive Habitat Area
SSS = Special Status Species



AECOM, 2023
Caltrans, 2023
ESRI Imagery, 2022

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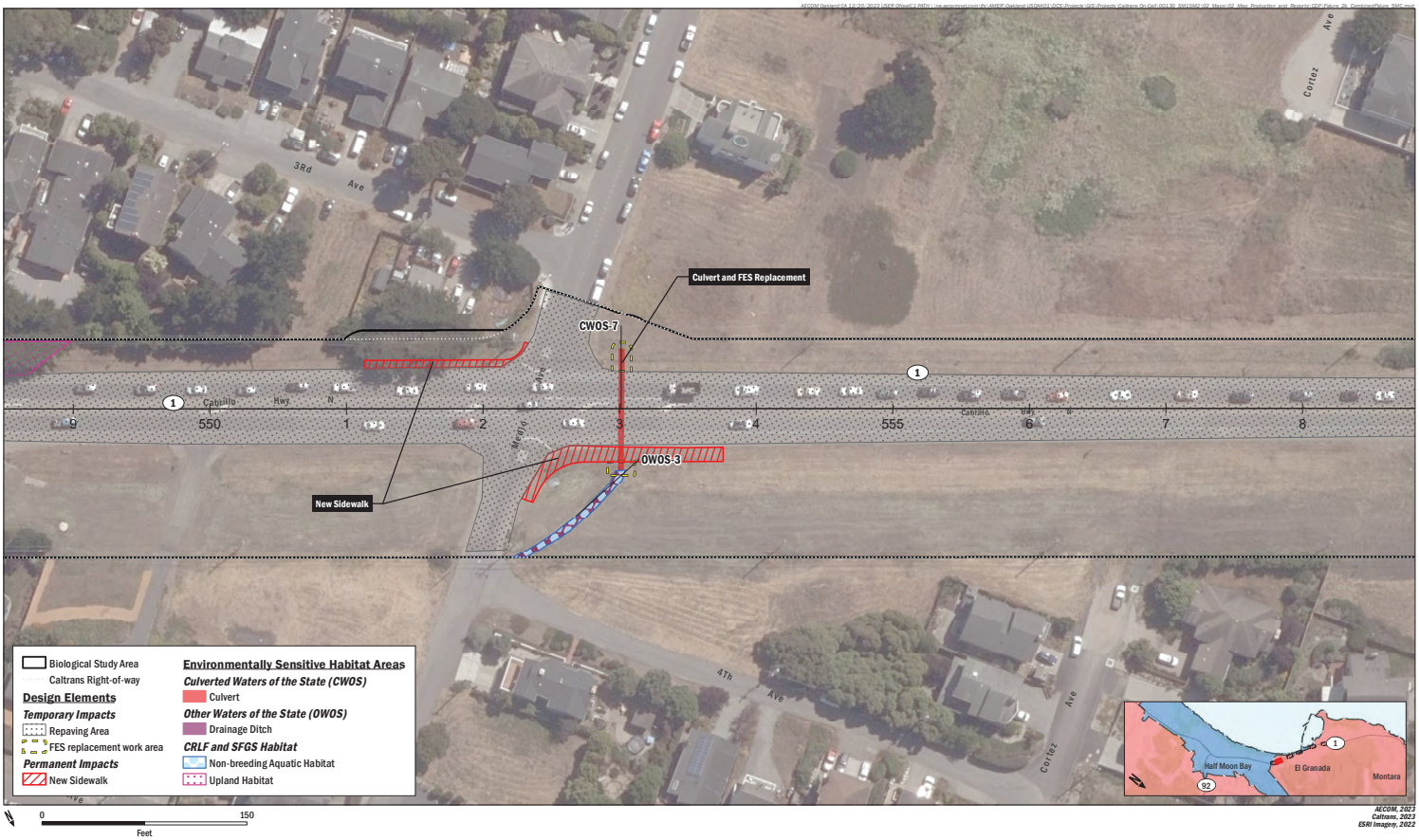
Caltrans District 4

State Route 1 Multi-Asset Roadway Rehabilitation Project
San Mateo County, CA
PM 27.5/34.8
EA 04-0Q130 / Project ID 0418000053

FIGURE 2

Impacts to Environmentally Sensitive Habitat Areas
San Mateo LCP



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EA 04-0Q130 / Project ID 0418000053

FIGURE 2

Impacts to Environmentally Sensitive Habitat Areas
San Mateo LCP

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FIGURE 2

Impacts to Environmentally Sensitive Habitat Areas
San Mateo LCP

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FIGURE 2

Impacts to Environmentally Sensitive Habitat Areas
San Mateo LCP

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FIGURE 2

Impacts to Environmentally Sensitive Habitat Areas
San Mateo LCP

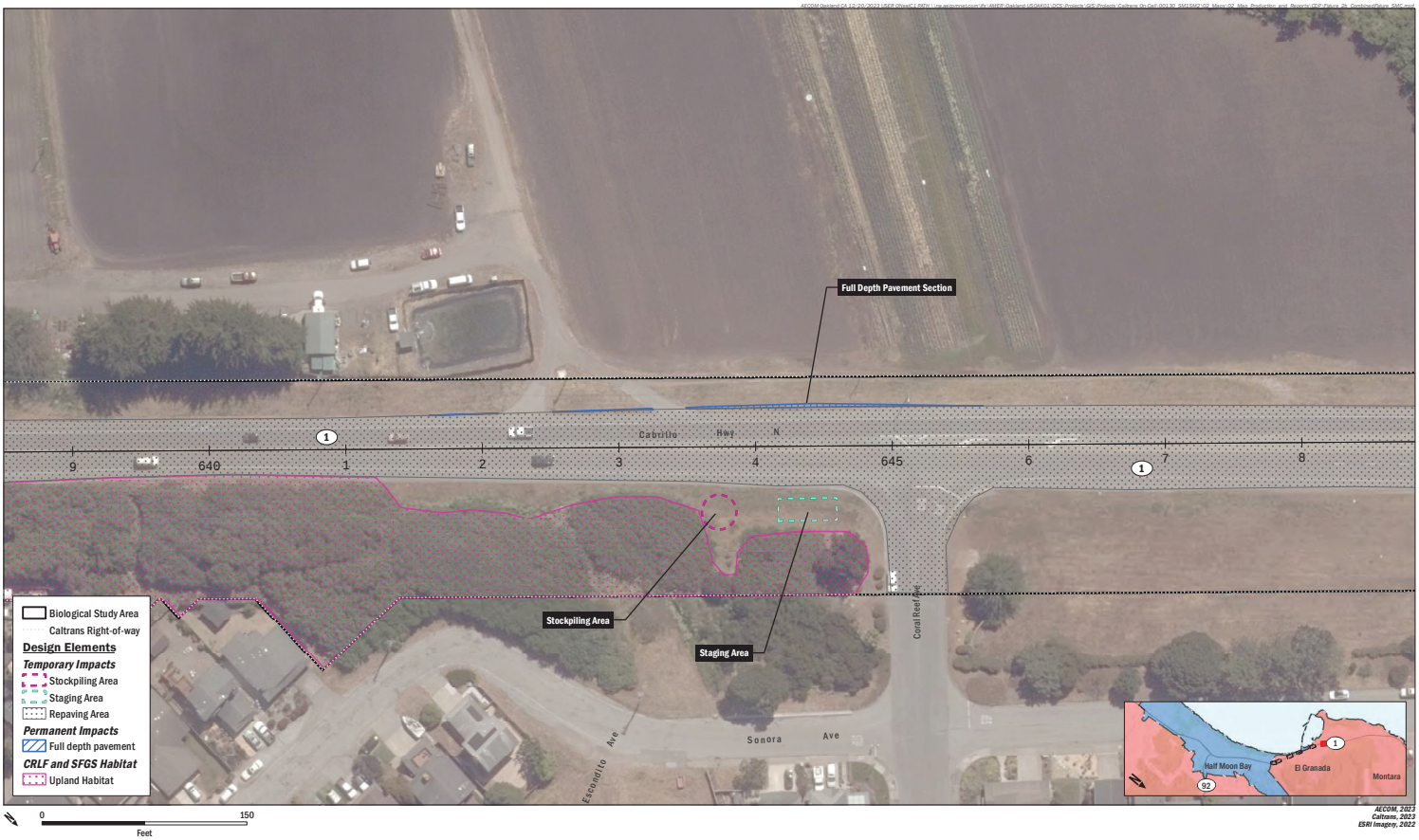

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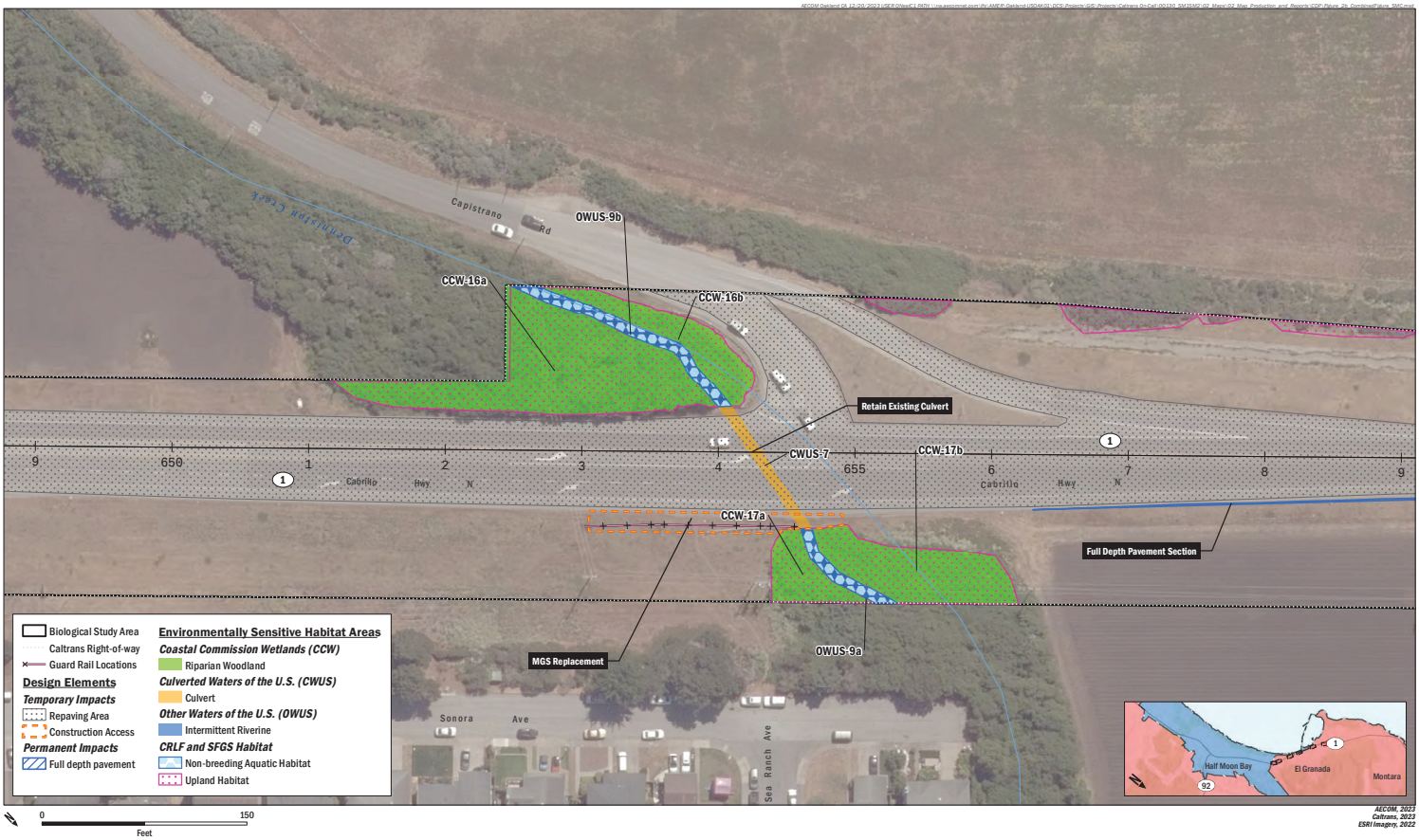
FIGURE 2

Impacts to Environmentally Sensitive Habitat Areas
San Mateo LCP



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Caltrans, 2023
ESRI Imagery, 2022

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PM 27.5/34.8
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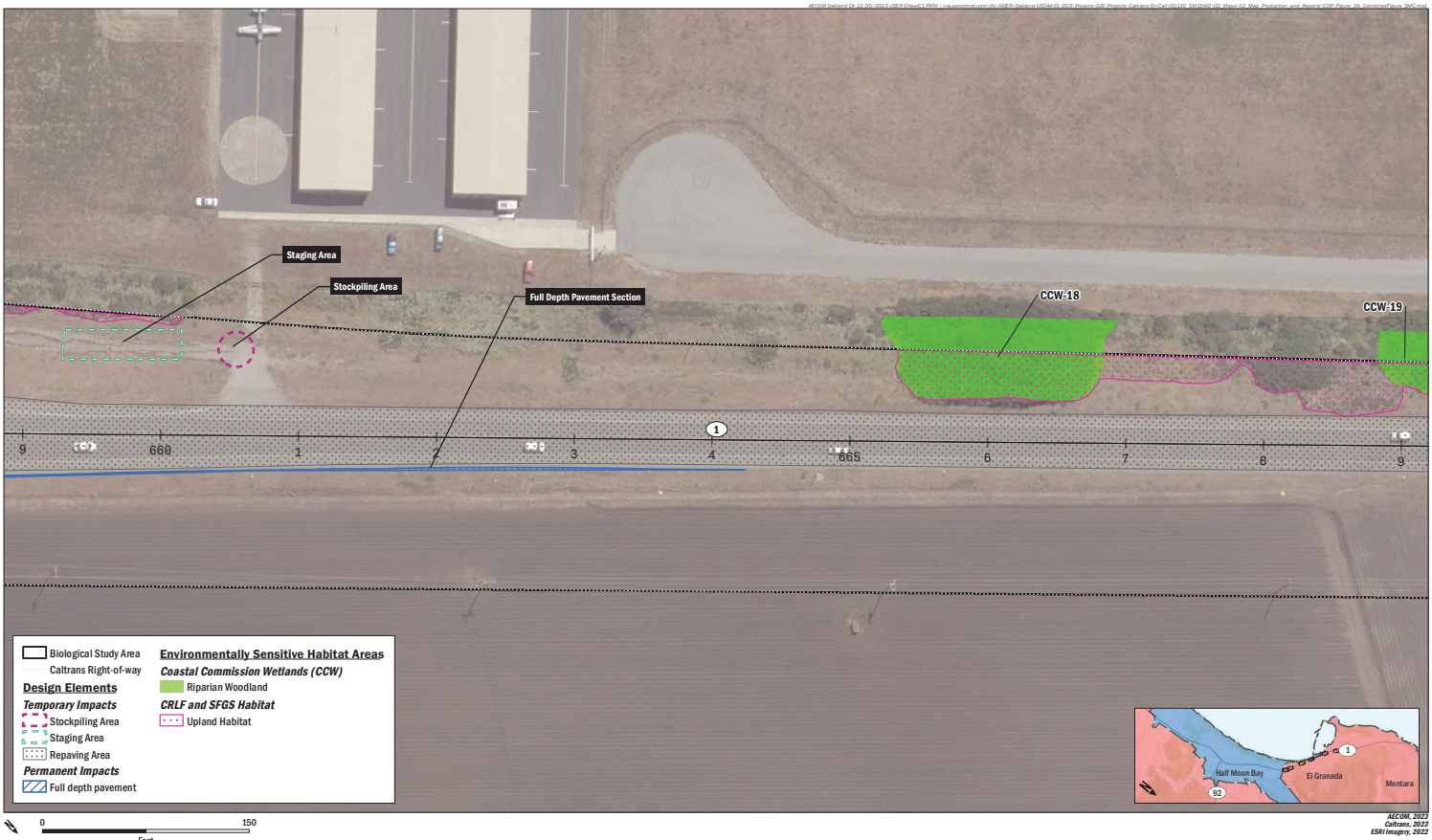
FIGURE 2

Impacts to Environmentally Sensitive Habitat Areas
San Mateo LCP
Page 7 of 8



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State Route 1 Multi-Asset Roadway Rehabilitation Project
San Mateo County, CA
PM 27.5/34.8
EA 04-0Q130 / Project ID 0418000053

FIGURE 2

Impacts to Environmentally Sensitive Habitat Areas
San Mateo LCP

6.2 Public Access

The Project would improve existing bicycle and pedestrian transportation facilities used by the public throughout the SR 1 corridor in the Project area. The Project's Transportation Management Plan, as described in Section 2.5, would account for any temporary impediments to access during construction, to maintain access.

6.3 Visual Impacts

Potential visual impacts were evaluated as part of the CEQA Initial Study with Negative Declaration (IS/ND) (Appendix F). It was determined that the project would have no impact on scenic vistas and scenic resources, and a less than significant impact on visual character. It would also have a less than significant impact related to light and glare. The following project elements are anticipated to result in minor visual change:

- **Replacement of existing guardrails and crash cushions.** Existing nonstandard guardrails will be replaced with MGS. Additionally, existing nonstandard and damaged crash cushions will be replaced. As stated in the IS/ND, Caltrans will use matte finish on exposed metal surfaces of guardrail to reduce glare.

- **Installation of conduits and traffic operation system elements.** Conduits and TMS loops would not be visible, as they would both be installed underneath the roadway. CCTV and fixed intersection cameras would be a minor change to existing signal poles at certain highway intersections.

- **Bicycle and Pedestrian Improvements.** The Project will add new bicycle lanes and striped crosswalks, and will bring existing curb ramps and sidewalks up to ADA standards.

Figures 3 – 8 below show examples of the project features that would be visible.

Figure 3: Example Midwest Guardrail System with crash cushion

Figure 4: Example fixed intersection camera/CCTV

Figure 5: Example ADA-compliant curb ramp

Figure 6: Example striped crosswalk

Figure 7: Example Class I bike path

Figure 8: Example Class II bike lane

6.4 Local Projects

The Project has been designed in collaboration with both San Mateo County and the City of Half Moon Bay in order to avoid potential conflicts with other local projects. The following projects were incorporated into the Project's design as part of the existing conditions:

- City of Half Moon Bay, Highway 1 North Main Street project, 04-4H710, PM 29.1/30.0
- County of San Mateo, Mid-Coast Multi-Modal Trail Improvements Project, 04-4K040, PM31.2 to 32.0

The local projects identified above are shown in relation to the Project limits in Figure 9 below.

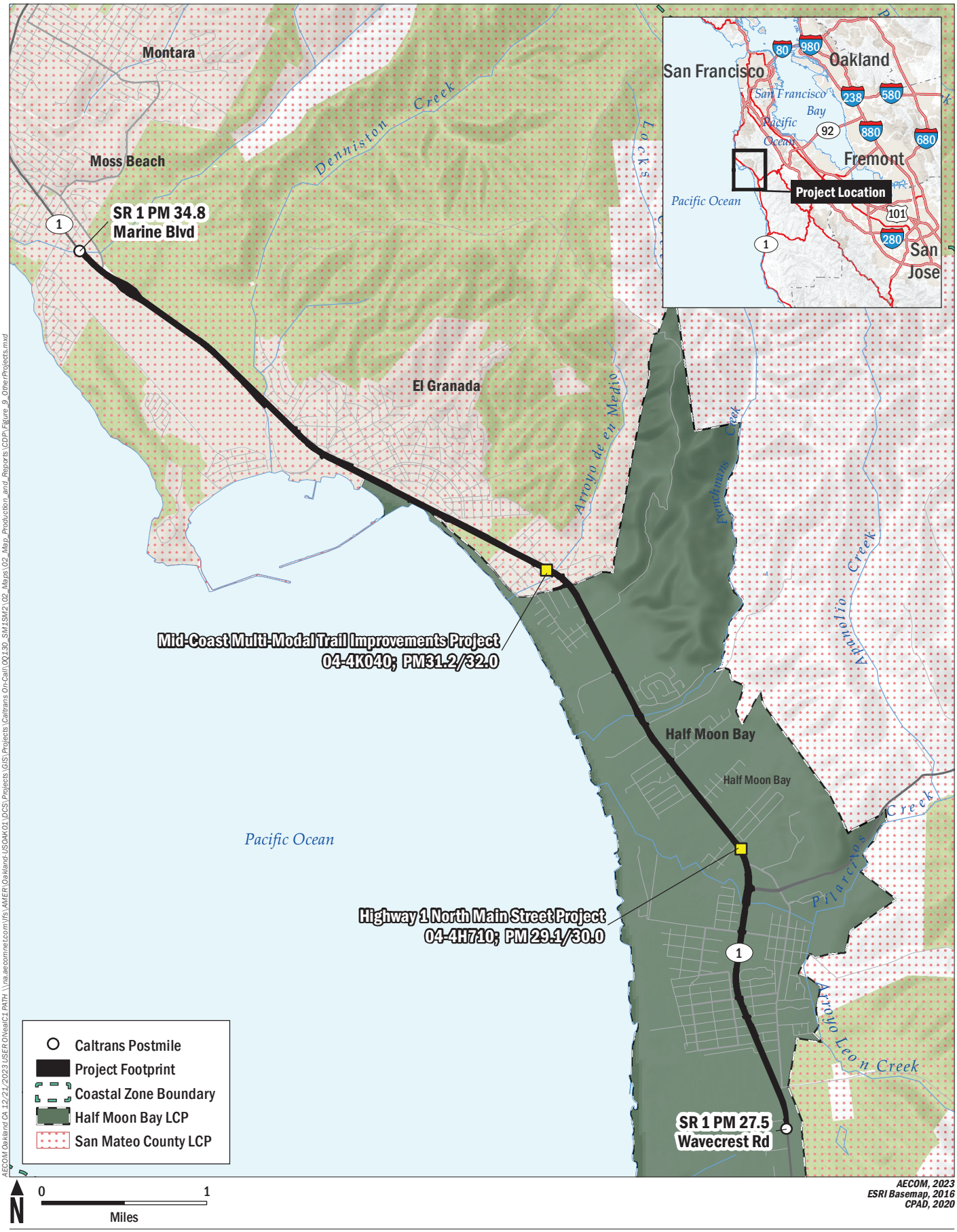

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FIGURE 9

Other Project Locations

Chapter 7: Other Application Items

7.1 CEQA and NEPA

7.1.1 CEQA

Caltrans is the State lead agency for the CEQA. The project completed its requirements under CEQA and filed its Notice of Completion for the project's Initial Study with Negative Declaration on October 21, 2022 (State Clearing House Number 2022070140). The project's final Initial Study with Negative Declaration is available online at:

https://dot.ca.gov/-/media/dot-media/district-4/documents/d4-environmental-docs/0q130-sr-1-multi-asset-roadway-rehabilitation/2022-10-12-0q130-fed-final-508-cc-a11y.pdf.

The project's CEQA documentation is available online at: https://ceqanet.opr.ca.gov/Project/2022070140.

The project's Notice of Determination is attached with this supplemental information as Appendix F.

7.1.2 NEPA

Caltrans is the federal lead agency under the NEPA and has prepared a Categorical Exclusion (CE) for the project. The project's CE documentation is included with this supplemental information document as Appendix G.

7.2 Site Plans

A copy of the project's draft 95% plan sheets is included as Appendix B. Caltrans is providing a digital copy of the project plan sheets. Hard copies of project plan sheets may be provided upon request.

7.2.1 Site Access

Staging during construction would occur within the Caltrans right-of-way outside of environmentally sensitive areas in urban, ruderal, or grassland areas. Paved areas for staging include portions of SR 1, maintenance pullouts, and paved trails. Unpaved areas for staging would include landscaped areas and wild oat and annual brome grasslands adjacent to paved intersections of the highway.

Due to existing limited roadway and shoulder widths, the existing use of temporary K-rail, and the presence of overhead utility lines, there may be limitations on the types of equipment and vehicles that can be used during construction. Although staging areas are anticipated, construction work would also be along the outside shoulders. Construction crews would access the construction sites from the existing roadway. During construction of the project, the lane adjacent to the work area would need to be closed. This would require one-way reversing traffic control during working hours, with a

temporary K-rail to protect the work area. Existing pullouts would most likely be needed to stockpile construction material and for use as construction staging areas.

7.3 Site Posting Notice

San Mateo County will be posting notice at the site and in the local newspaper for the project and will provide documentation to Caltrans for its project records during CDP application review.

7.4 Water Connection

Caltrans is not seeking a water connection commitment from the Coastside County Water District.

7.5 Stormwater Pollution Control

The project does not appear to fit the definition of a regulated project in the current California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region, Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (Order No. R2-2022-0018; NPDES Permit No. CAS612008) or the previous Municipal Regional Stormwaters NPDES Permit (Order No. R2-2015-0049; NPDES Permit No. CAS612008) under Provision C.3. Thus, a stormwater checklist for small projects or C.3 projects is not included with this application.

The project will comply with Caltrans' general permit issued by the State Water Resources Control Board (SWRCB) for Order No. 2012-0011-DWQ, NPDES No. CAS000003, NPDES Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for State of California, Department of Transportation. Caltrans' general permit governs stormwater and non-stormwater discharges from Caltrans properties, facilities, and activities. For Caltrans' general permit, go to the Caltrans Program link on the Storm Water Program page of the SWRCB website.

Project construction activities would be subject to the California State Water Resources Control Board's National Pollutant Discharge Elimination System, under Construction General Permit (CGP; Order No. 2009-0009-DWQ) and would require preparation of either a water pollution control plan (WPCP) or a stormwater pollution prevention plan (SWPPP). The current estimate indicates that the Project would cause a disturbed soil area less than 1 acre, and development of a WPCP is expected.

The project would not exceed the threshold of one acre of new impervious surface, therefore post-construction stormwater treatment BMPs are not required.

7.6 Title Report and Legal Description

The project occurs entirely within Caltrans existing right-of-way for SR 1. A title report and legal description is not anticipated to be required to process this CDP request.

7.7 Affidavit of Application Materials

The signed affidavit of application materials is provided with the permit application form that this supplemental document is attached to.

7.8 Parcel Map, Tentative Subdivision Map, Lot Line Adjustment and Lot Merger Applications information

The project is not applying for a Parcel Map, Tentative Subdivision Map, Lot Line Adjustment, or Lot Merger, and no supplemental forms providing additional information are required.

7.9 Other State and Federal Permits

Table 7-1 summarizes State and federal permits that Caltrans is concurrently seeking from the following agencies for the project. Caltrans notes that although waters under federal Clean Water Act jurisdiction occur within the project BSA, the project anticipates that discharges would not occur within those waters. Impacts to waters within the BSA are limited to waters of the State only, and subject to regulation by the RWQCB under the Porter Cologne Water Quality Control Act. Caltrans will not require or be seeking a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers (USACE) or a Section 401 Water Quality Certification from the RWQCB.

Table 7-1. Project Permits

Issuing Agency	Regulatory Authority	Permit Type
USFWS	Federal Endangered Species Act Section 7 Consultation	Biological Opinion 08FBDT00 2020 F-2392
RWQCB	Porter Cologne Water Quality Control Act	Enrollment under Statewide General Waste Discharge Requirements for Dredged or Fill to Waters deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction (Order No. 2004.0004-DWQ)
City of Half Moon Bay	California Coastal Act/Local Coastal Program	Coastal Development Permit
San Mateo County	California Coastal Act/Local Coastal Program	Coastal Development Permit

Notes:
RWQCB = Regional Water Quality Control Board
USFWS = U.S. Fish and Wildlife Service

Chapter 8: Agency Coordination

Caltrans is consulting with local coastal planning agencies, Central California Coast (CCC), USFWS, CDFW, USACE, and RWQCB to secure the necessary permits detailed in Table 7-1. This section describes interagency coordination to date, and ongoing consultation.

8.1 City of Half Moon Bay Local Coastal Program, San Mateo County Local Coastal Program, and the California Coastal Commission

The Project is under the jurisdiction of the San Mateo County LCP and City of Half Moon Bay local coastal land use plan. It is also within the appeals jurisdiction of the CCC.

Caltrans' coordination in the Coastal Zone has included discussing potential locations for Project components with various public agencies.

On September 23, 2021, Caltrans hosted a joint preliminary stakeholder outreach meeting to provide a summary of the Project, as well as the nearby San Mateo SR 1 Safety Barrier Project (EA 0Q610/Project ID 0418000123). Attendees included representatives from the following agencies:

- CCC
- San Mateo County
- City of Half Moon Bay
- Midcoast Community Council
- Half Moon Bay Coastside Chamber of Commerce

Caltrans presented an overview of both projects and solicited feedback and questions from the meeting attendees. Attendees voiced both support and concerns, and asked questions regarding the Project components. Caltrans will continue to coordinate with all stakeholders as the Project moves forward.

On March 28, 2022, Caltrans hosted a follow-up stakeholder outreach meeting to provide updates on the Project ahead of the public circulation of the draft environmental document. Attendees included representatives from the following offices and agencies:

- The Office of Assemblymember Kevin Mullin
- San Mateo County Sheriff's Department
- California Department of Forestry and Fire Protection (CAL FIRE)
- CCC
- San Mateo County
- City of Half Moon Bay
- Midcoast Community Council
- Half Moon Bay Coastside Chamber of Commerce

Caltrans gave a slide presentation that included an overview of the 0Q130 Project scope, visual simulations, schedule, and budget to coastal stakeholder groups for follow-up outreach and Project coordination. The second half of the meeting was open discussion. Attendees asked questions about Project components, and voiced concerns regarding the proposed variable message signs. Caltrans determined that it would carry this Project forward without including the variable message signs.

On April 13 and 14, 2022, Caltrans held three separate meetings with stakeholder groups, including the CCC, CAL FIRE, the California State Assembly, California Highway Patrol, San Mateo County Planning Department, the City of Half Moon Bay, the Half Moon Bay Coastside Chamber of Commerce, and the Midcoast Community Council. These meetings were held to receive feedback on the Project.

On July 5, 2023, Caltrans met with the CCC, San Mateo County, and the City of Half Moon Bay to discuss the appropriate permitting action for the Project. Through this meeting and ensuing coordination, CCC determined that the project did not occur within retained Coastal Zone jurisdiction and that a consolidated CDP would not be an option. Caltrans determined that the appropriate permitting pathway would be to file two separate coastal development permit request for the Project – one with the City of Half Moon Bay, and one with San Mateo County.

On July 21, 2023, Caltrans provided draft 65 percent design plan sheets to San Mateo County staff and City of Half Moon Bay staff for review and comment.

On August 21, 2023, San Mateo County staff provided comments on the draft 65 percent design plans. Caltrans reviewed and considered the comments provided in the attached 95-percent plans included with this application.

8.2 U.S. Fish and Wildlife Service

Consultation with USFWS pursuant to Section 7 is ongoing. A USFWS BA has been prepared and consultation is concurrent with this CDP. Caltrans determined that consultation with the NMFS is not necessary because the Project is anticipated to have no effect on federally listed species, or their habitat, regulated by NMFS.

8.3 California Department of Fish and Wildlife

Special status species listed under California Endangered Species Act (CESA), considered species of special concern by CDFW, or listed as state fully protected under California Fish and Game Code that have the potential to occur in the BSA were considered in the project's CEQA Initial Study. Caltrans has adopted measures for the project to avoid and minimize potential impacts on special status species with state protections.

8.4 U.S. Army Corps of Engineers

Caltrans does not anticipate impacts to federal Clean Water Act section 404 waters within the project area.

8.5 San Francisco Bay Regional Water Quality Control Board

Because the project is not impacting federal waters, but may impact waters that are potentially jurisdictional as waters of the State under the Porter Cologne Water Quality Control Act, Caltrans is submitting a Notice of Intent request for enrollment under RWQCB Order No. 2004-0004-DWQ. The potential waters within the Project area are

existing culverts and ditches that were constructed as stormwater drainage features and do not provide surface connection to jurisdictional WOTUS.

Chapter 9: References

California Coastal Commission. 2011. California Coastal Commission October 5, 2011 briefing: Definitiion and Delineation of Wetlands in the Coastal Zone. Available online at: https://documents.coastal.ca.gov/reports/2011/10/W4-10-2011.pdf.

California Department of Transportation (Caltrans). 2016. *Pavement Condition Report*.

———. 2021. State Route 1 Multi-Asset Roadway Rehabilitation Project Aquatic Resource Delineation, San Mateo County, California, 04-01-SM-PM 27.5/34.8, EA 04-0Q130. Project ID 04-1800-0053.

San Mateo County 2013a. Local Coastal Program Policies. Available online at: file:///C:/Users/broden.farazmand/Downloads/SMC_Midcoast_LCP_2013%20(1).pdf.

_____.2013b. Midcoast Land Use Plan. Available online at: https://www.smcgov.org/media/73056/download?inline=.

U.S. Fish and Wildlife Services (USFWS). 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog. Available online at: https://fws.gov/media/revised-guidance-site-assessments-and-field-surveys-california-red-legged-frog.

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT G

State Route 1 Multi-Asset Roadway Rehabilitation Project

SAN MATEO COUNTY, CALIFORNIA
04-01-SM-PM 27.5/34.8
EA 04-0Q130 / Project ID 04-1800-0053

Initial Study with Negative Declaration

Prepared by the
State of California, Department of Transportation

October 2022

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General Information about this Document

The California Department of Transportation (Caltrans) has prepared this Initial Study (IS) with Negative Declaration (ND) for the proposed Project in San Mateo County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This document explains why the Project is being proposed, what alternatives have been considered for the Project, how the existing environment could be affected by the Project, the potential impacts of each of the alternatives, and the proposed avoidance and minimization measures. The draft IS with proposed ND was circulated to the public for 30 days between July 8, 2022, and August 8, 2022. Comments received during this period are included in Appendix F. Elsewhere throughout this document, a vertical line in the margin indicates a change made since the draft document circulation. Minor editorial changes and clarifications have not been so indicated. Additional copies of this document and the related technical studies are available for review at 111 Grand Ave, Oakland, CA 94612.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to: Department of Transportation, District 4, Attention: John Seal, P.O. Box 23660 MS 8B, Oakland, CA 94623-0660; email John.Seal@dot.ca.gov; (510) 549-6091 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1 (800) 854-7784 (Spanish and English Speech-to-Speech) or 711. An Americans with Disabilities Act-compliant electronic copy of this document is available to download from the Caltrans District 4 environmental document website at https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs.

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State Clearinghouse Number: 2022070140
04-SM-01-27.5/34.8
EA No. 04-0Q130
Project No. 04-1800-0053

State Route 1 Multi-Asset Roadway Rehabilitation Project
(Post Miles SM-01 27.5/34.8)

Initial Study with Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agencies:
California Transportation Commission
San Mateo County
City of Half Moon Bay
California Coastal Commission
California Department of Fish and Wildlife

Date

Scott M. Williams
Acting Office Chief, Environmental Analysis
California Department of Transportation
CEQA Lead Agency

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Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) is proposing the State Route (SR) 1 Multi-Asset Roadway Rehabilitation Project (Project) to rehabilitate existing pavement, improve existing traffic facilities, install Complete Streets elements, and install traffic operations system elements along SR 1 in San Mateo County, California. The Project also proposes to install traffic operation system elements at two locations on SR 92 in San Mateo County, California. The Project would include rehabilitating pavement; replacing existing drainage inlets, culverts, and dikes; replacing existing guardrails with Midwest guardrail systems; replacing existing crash cushions; upgrading curb ramps; implementing Complete Streets elements; upgrading signal poles; installing conduits; installing traffic operation system elements (intersection cameras, closed-circuit television cameras, and traffic monitoring stations); and relocating and/or replacing utility cabinets.

Determination

Caltrans has prepared an Initial Study 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 Project would have no effect on agriculture and forestry, air quality, cultural resources, mineral resources, noise, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems.

- With standard Caltrans conservation measures and Project-specific avoidance and minimization measures the Project would have less-than-significant effects to aesthetics and biological resources, including wetlands and waters, riparian habitats, California red-legged frog, San Francisco garter snake, steelhead, Coho salmon, and Ornduff's meadowfoam. The Project would have a less-than-significant impact on energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, transportation, and wildfire.

_____ _____

Melanie Brent
Deputy District Director
Environmental Planning and Engineering
California Department of Transportation, District 4

Date of Approval

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Table of Contents

Appendices

Figures

Tables

Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ADA	Americans with Disabilities Act
ADL	Aerially Deposited Lead
APE	Area of Potential Effects
ARB	California Air Resources Board
BAAQMD	Bay Area Air Quality Management District
Basin Plan	San Francisco Regional Water Quality Control Board's water quality control plan
BMP	best management practice
BSA	Biological Study Area
CAFÉ	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CAPTI	*California Action Plan for Transportation Infrastructure*
CCA	California Coastal Act of 1976
CCAG	City and County Association of Governments of San Mateo County
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH_4	methane
CHP	California Highway Patrol
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRPR	California Rare Plant Rank
CSO	Cultural Studies Office
CTP	California Transportation Plan
dB	decibels
DOC	California Department of Conservation
DPS	distinct population segment

EFH	Essential Fish Habitat
EO	Executive Order
EOP	Emergency Operations Plan
ESA	environmentally sensitive area
ESU	Evolutionarily Significant Unit
FC	federal candidate
FD	Federally Delisted
FE	federal endangered
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FHWA	Federal Highway Administration
FR	Federal Register
FT	federally threatened
GHG	greenhouse gas
GO	Goal and Objective
GWP	global warming potential
H&SC	Health and Safety Code
HFC	hydrofluorocarbon
ICBO	International Conference of Building Officials
IS	Initial Study
LCFS	low carbon fuel standard
LCLUP	Local Coastal Land Use Plan
LCP	local coastal program
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
MTC	Metropolitan Transportation Commission
NAHC	Native American Heritage Commission
ND	Negative Declaration
N_2O	nitrous oxide
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OPC	Ocean Protection Council
OPR	California Governor's Office of Planning and Research
OCRS	Caltrans Office of Cultural Resources
PAED	Project Approval and Environmental Document
PDT	Project Development Team
PM	post mile
ppt	parts per thousand
PQS	Professionally Qualified Staff
PRC	Public Resources Code

Project	State Route 1 Multi-Asset Roadway Rehabilitation Project
PS and E	Plans, Specifications, and Estimates
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SamTrans	San Mateo County Transit District
SB	Senate Bill
SC	state candidate
SCS	Sustainable Communities Strategy
SD	State Delisted
SE	state endangered
SMLCP	San Mateo Local Coastal Program
SR	State Route
SSC	= state species of special concern
ST	state threatened
SWPPP	stormwater pollution prevention plan
TAC	Transportation Analysis Under CEQA
TMP	traffic management plan
TOS	traffic operations system
USC	United States Code
U.S. DOT	United States Department of Transportation
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	vehicle miles traveled
WPCP	water pollution control plan

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Chapter 1 Proposed Project

1.1 California Environmental Quality Act Lead Agency Status

The State Route (SR) 1 Multi-Asset Roadway Rehabilitation Project (Project) is subject to state environmental review requirements. Project documentation has been prepared in compliance with the California Environmental Quality Act (CEQA). The California Department of Transportation (Caltrans) is the lead agency under CEQA and sponsor for the Project, and has prepared this draft Initial Study (IS) and Negative Declaration (ND) for the Project.

1.2 Introduction

Caltrans is proposing the Project to rehabilitate existing pavement, improve existing traffic facilities, install Complete Streets elements ("Complete Streets" is a Caltrans policy directive intended to provide safe mobility for all users, including bicyclists and pedestrians; see Section 1.3.2), and install traffic operations system (TOS) elements along SR 1 in San Mateo County, California. The Project would include rehabilitating pavement; replacing existing drainage inlets, culverts, and dikes; replacing existing guardrails with Midwest guardrail systems; replacing existing crash cushions; upgrading curb ramps; implementing Complete Streets elements; upgrading signal poles; installing conduits; installing traffic operation system elements (intersection cameras, closed-circuit television cameras, and traffic monitoring stations); and relocating and/or replacing utility cabinets.

1.3 Purpose and Need

1.3.1 Purpose

The Project would preserve and extend the life of the roadway to a condition that would require minimal maintenance expenditures, improve the ride quality, upgrade drainage systems, improve roadway safety, enhance pedestrian and bicycle access, and upgrade the traffic system infrastructure.

1.3.2 Need

The pavement on SR 1 in the Project area was evaluated in 2016 and is in poor condition overall (Caltrans 2016). Caltrans uses the International Roughness Index to evaluate and determine how smooth or rough a pavement surface is. The Federal Highway Administration (FHWA) International Roughness Index threshold for acceptable pavement surface is between 170 and 96, the threshold for good road surface is 95 or less, and surfaces that are greater than 170 do not meet the acceptable threshold. The stretch of Project highway pavement surface ranges from 100 to 226. If left untreated, this portion of SR 1 will continue to provide poor ride quality to users and will require frequent, expensive maintenance. Portions of the highway are near the acceptable roughness threshold, but continued pavement degradation is expected over time. In addition, existing highway elements and facilities in the Project area are worn out or functionally obsolete and need to be replaced. The current traffic systems (e.g., guard rails, crash cushions, and drainage) are approaching the ends of functional life and need to be upgraded.

"Complete Streets" is a Caltrans policy directive intended to provide safe mobility for all users, including bicyclists and pedestrians, and is a consideration during Project development. According to Director's Policy 37, signed on December 7, 2021, it is Caltrans' organizational

priority to encourage and maximize walking, bicycling, transit, and passenger rail as a strategy to not only meet state climate, health, equity, and environmental goals but also to foster socially and economically vibrant, thriving, and resilient communities (Caltrans 2021g). Therefore, the need to consider Complete Streets elements (e.g., curb ramps, sidewalks, and cross walks) is included in the Project design.

1.4 Project Description

This section describes how the Project would be developed to meet its purpose and need while avoiding or minimizing adverse environmental impacts. Two alternatives have been identified: the Build Alternative and the No-Build Alternative. The No-Build Alternative would not meet the Project's purpose and need. Project elements are described next, and a mapbook summarizing all Project elements at their various locations is provided in Appendix A.

1.4.1 Project Location

The Project area is in and north of Half Moon Bay in San Mateo County, California. The Project area is on SR 1 between post mile (PM) 27.5 (SR 1 at Marine Boulevard) and PM 34.8 (SR 1 at Wavecrest Road); and SR 92 at PM 0.2 (at Main Street) (Figure 1-1).

Figure 1-1 Project Vicinity

1.4.2 Roadway Rehabilitation

Caltrans is proposing a 20-year flexible rehabilitation pavement strategy to address poor pavement conditions. To rehabilitate the roadway, Caltrans would cold plane (mill the roadway surface down to design depths to restore and smooth the roadway conditions) 0.40 foot of existing asphalt concrete pavement, and then replace it with a structural section composed of 0.20 foot of gap-graded rubberized hot mix asphalt, 0.25 foot of hot mix asphalt, a geosynthetic pavement interlayer, and 0.10 foot of hot mix asphalt. The roadway profile would be raised by about 0.15 foot at Project completion. Pavement rehabilitation would occur across the entire Project location. This generally is shown on Figure 1-2, with detailed paving limits provided in Appendix A.

SR 1 within the Project limits is a two-lane undivided highway with two 12-foot lanes and 1-to 4-foot typical outside shoulders. The proposed roadway rehabilitation would not alter the existing roadway alignment.

1.4.3 Guardrail Replacement

All guardrails on SR 1 in the Project area would be removed and replaced with standard Midwest guardrail systems (Figure 1-2). Vegetation removal may be required to access guardrails, and excavation would be necessary during construction. Wooden support posts would be installed in drilled holes to an approximate depth of 4 feet below ground surface, and deeper holes may be recommended to address traffic safety standards at specific locations.

1.4.4 Crash Cushions Replacement

Nonstandard or damaged crash cushions in the Project area would be replaced at the same locations with new crash cushions, meeting current Caltrans standards for design and safety.

1.4.5 Signal Pole Upgrade

All nonstandard poles in the Project area would be replaced. The size of the poles would be determined during the Project's final design phase. Excavation would be required during replacement.

1.4.6 Conduits and Traffic Operation System Elements Installation

The proposed TOS elements are needed because SR 1, through the Project area, lacks traffic monitoring systems that can be used to collect data on traffic flow and volumes. These data can be used to inform future planning decisions and projects in San Mateo County. Overall, Caltrans anticipates that inclusion of TOS elements into this Project would improve traffic congestion along the corridor by helping to identify future transportation needs and deficiencies.

Caltrans proposes to upgrade and install new communication devices, such as closed-circuit television cameras, fixed intersection cameras, and traffic monitoring systems. Figure 1-3 through Figure 1-5 show the proposed locations for these TOS elements. New conduit installation to support these elements would require trenching during installation. Excavation limits would be determined by conduit size and location.

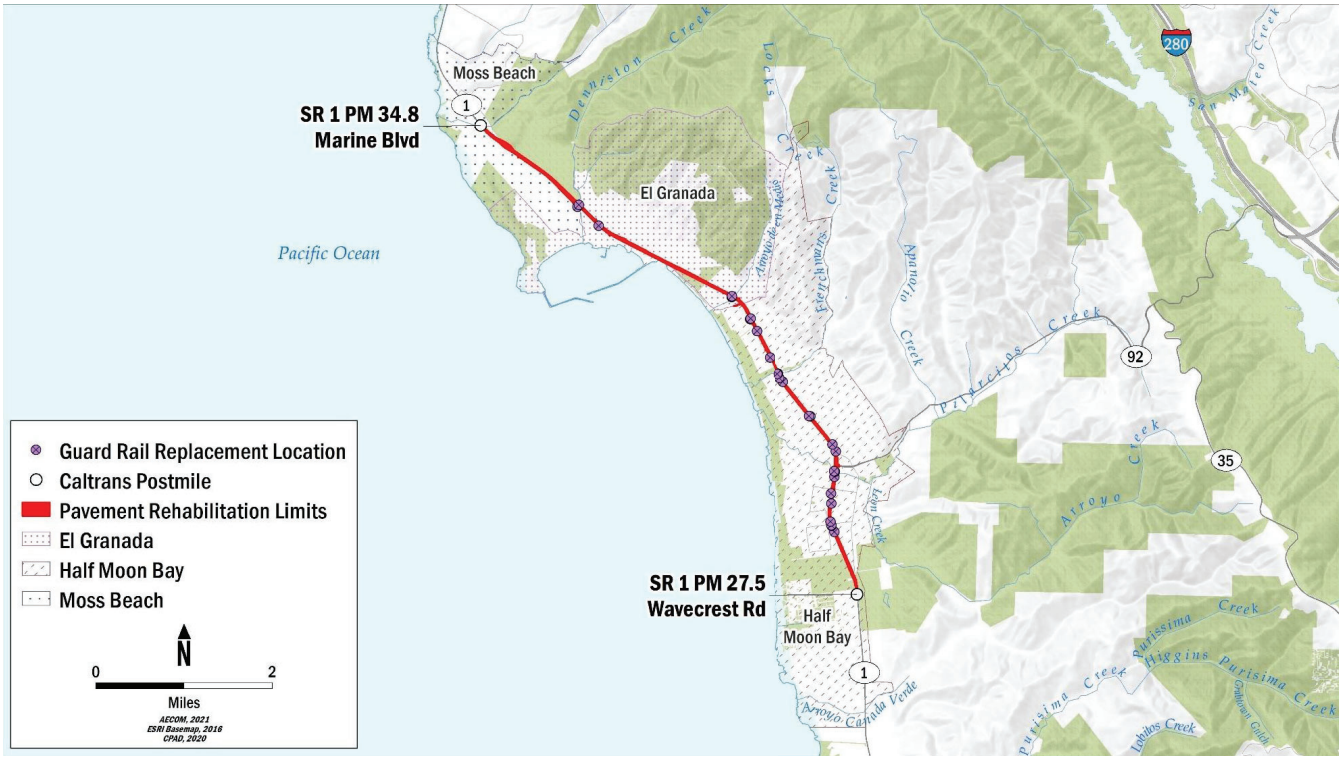

Figure 1-2 Roadway Rehabilitation and Guard Rail Replacement Locations

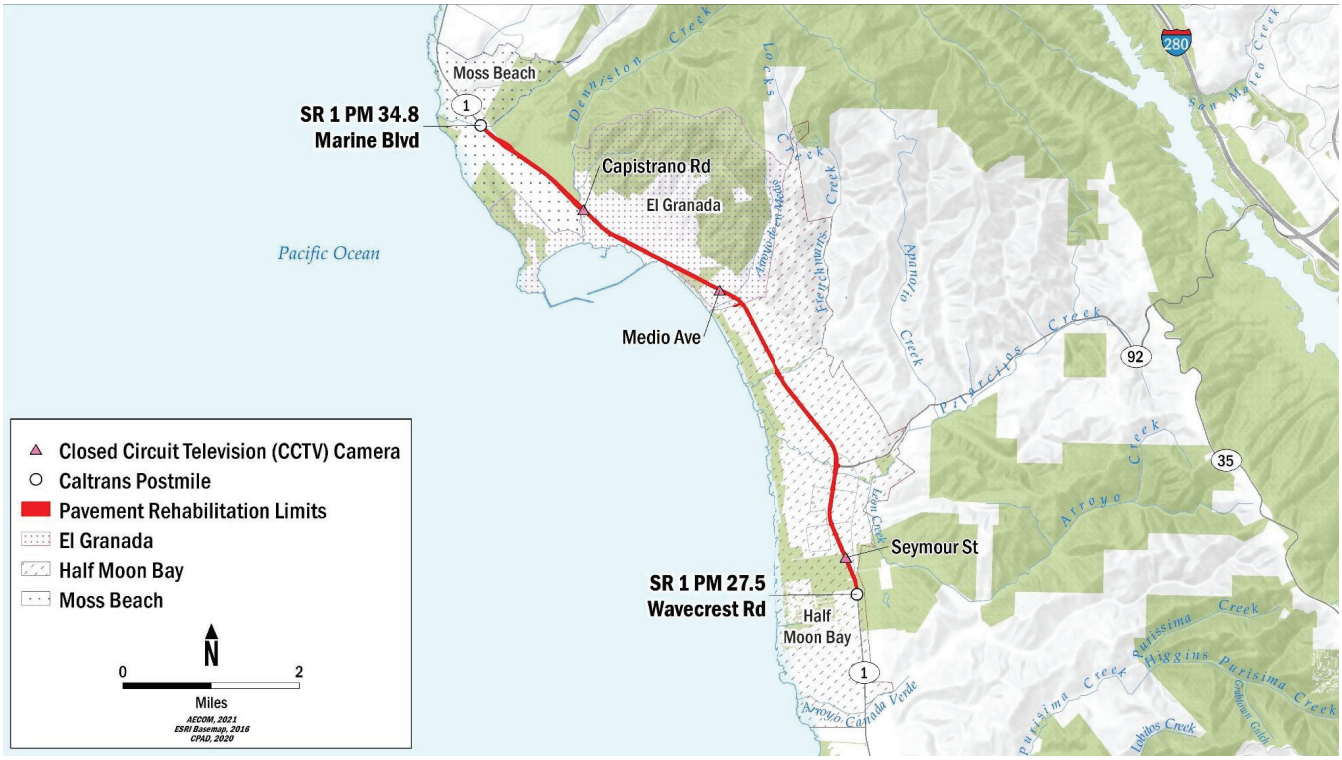

Figure 1-3 Closed Caption Television Camera Locations

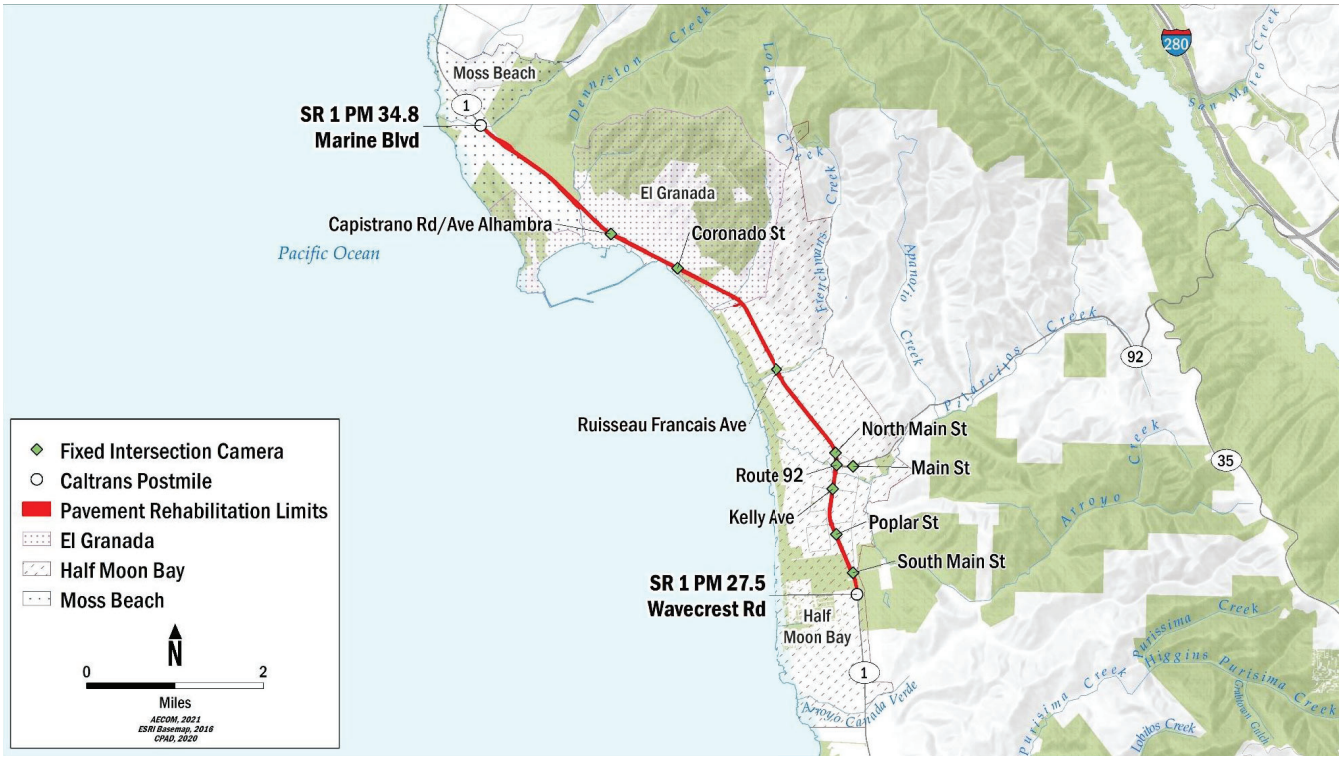

Figure 1-4 Fixed Intersection Camera Locations

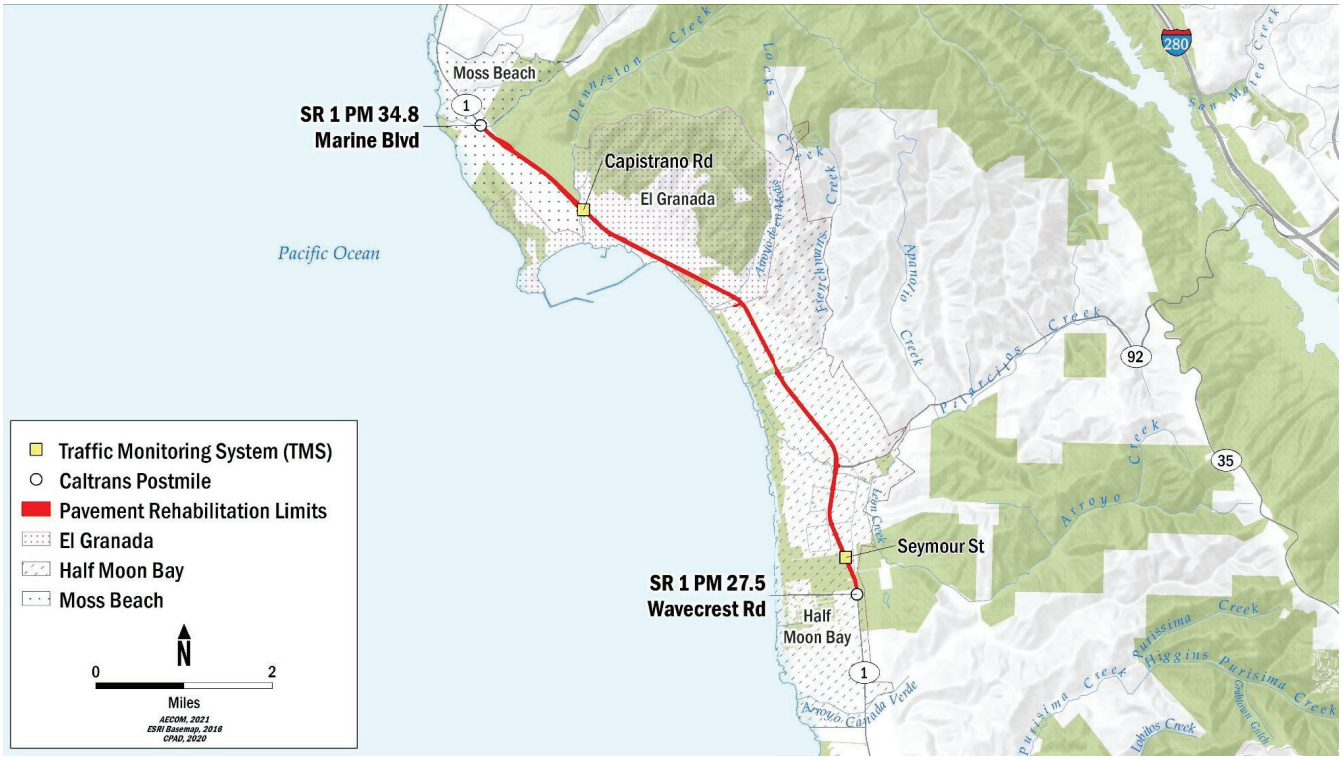

Figure 1-5 Traffic Management System Locations

1.4.7 Drainage Inlet, Culvert, and Dike Replacement

Caltrans' hydraulic engineers have conducted a preliminary review of existing drainage elements and anticipate the following work:

- Replacement of 12-inch-diameter pipes with 18-inch-diameter pipes
- Replacement of a headwall and 20-foot-long pipe for a 72-inch-diameter reinforced concrete pipe at PM 31.31
- Addition or replacement of flared end sections at ends of pipes as needed
- Lining the inside of 24-inch, 36-inch, and 60-inch pipes as needed
- Cleaning and clearing buried pipe ends to maintain flow pattern
- Repairing or replacing damaged headwalls to improve flow into culverts
- Regrading certain unlined ditches to maintain original flow pattern
- Cleaning existing drainage facilities

Excavation would be required during culvert replacement work. Typical culvert replacement work would require an excavation width that would be 2 feet wider than the culvert (1 foot on each side); the excavation depth would be same as the depth of the existing culvert; and the excavation length would be about 2 feet longer than the existing culvert. Where culvert headwall installations are required, it would increase the length of excavation by a few feet, depending on final headwall design. Caltrans is completing survey work to refine its understanding of existing drainage elements. Figure 1-6 summarizes general locations, and details of the drainage improvements are provided in Appendix A.

1.4.8 Curb Ramp Upgrade

All nonstandard curb ramps in the Project area would be replaced with curb ramps that meet current Caltrans standards and would be compliant with Americans with Disabilities Act (ADA) requirements. The type and design of curb ramps would be determined based on location-specific conditions during the Project's final design phase. Excavation for curb ramps would be necessary during construction.

1.4.9 Complete Streets

Sidewalks, curb ramps, and markings would be constructed throughout the Project area to provide access for pedestrians and cyclists. Locations where Complete Streets elements are proposed are shown on Figure 1-7, and details are provided in Appendix A. The following street elements would be included as part of the Project:

- Class II bike lanes with striped buffers would be created on SR 1 in the Project area.
- Intersection improvements would occur, as follows:
    - In general, curve radii would be minimized, and curb extensions would be provided where curb ramp work is proposed to meet ADA requirements.
    - Crosswalks would be striped where the Class I path crosses Seymour Street, Grove Street, Filbert Street, Belleville Boulevard, Grand Boulevard, Kehoe Avenue, Frontage Road, Venice Boulevard, Frenchman's Creek Road, Young Avenue, and Alto Avenue. Caltrans would consider reducing corner radius, and curb ramps and/or path entrances would be squared up at these locations as feasible.

  - A fourth crosswalk would be installed across SR 1 at the Kelly Avenue intersection's northern leg. Caltrans would consider changes to the right-turn slip lanes that exit from and enter northbound SR 1, if feasible, during the final design phase of the Project.

  - The new sidewalk would be squared up on the eastern side of SR 1 and the SR 1/ SR 92 intersection. Crosswalks would be installed on all four legs.

  - Caltrans would consider changes to the slip lane at the SR 1/SR 92 intersection to accommodate pedestrian and bicycle crossing, or rectangular rapid flashing beacon and high-visibility crosswalks during the final Project design phase, if they are feasible.

  - A third crosswalk would be installed at the southern leg of the SR 1/Coronado Street intersection, to minimize crossings to the nearby school. The sidewalk on the western side of SR 1 would be connected to the southwestern corner, to connect with the new crosswalk, and/or a direct connection would be made to the nearby Class I path from the new south leg crosswalk.

  - New crosswalks would be squared up with and installed on all four legs of the SR 1/Capistrano Road intersection.

  - Caltrans would incorporate flush and raised median treatments in its final design, where possible.

- If the culvert is replaced at Arroyo de en Medio, the design would bring the shoulders up to current design standards.

- Transit stops would be paved, and new sidewalks would be connected along SR 1.

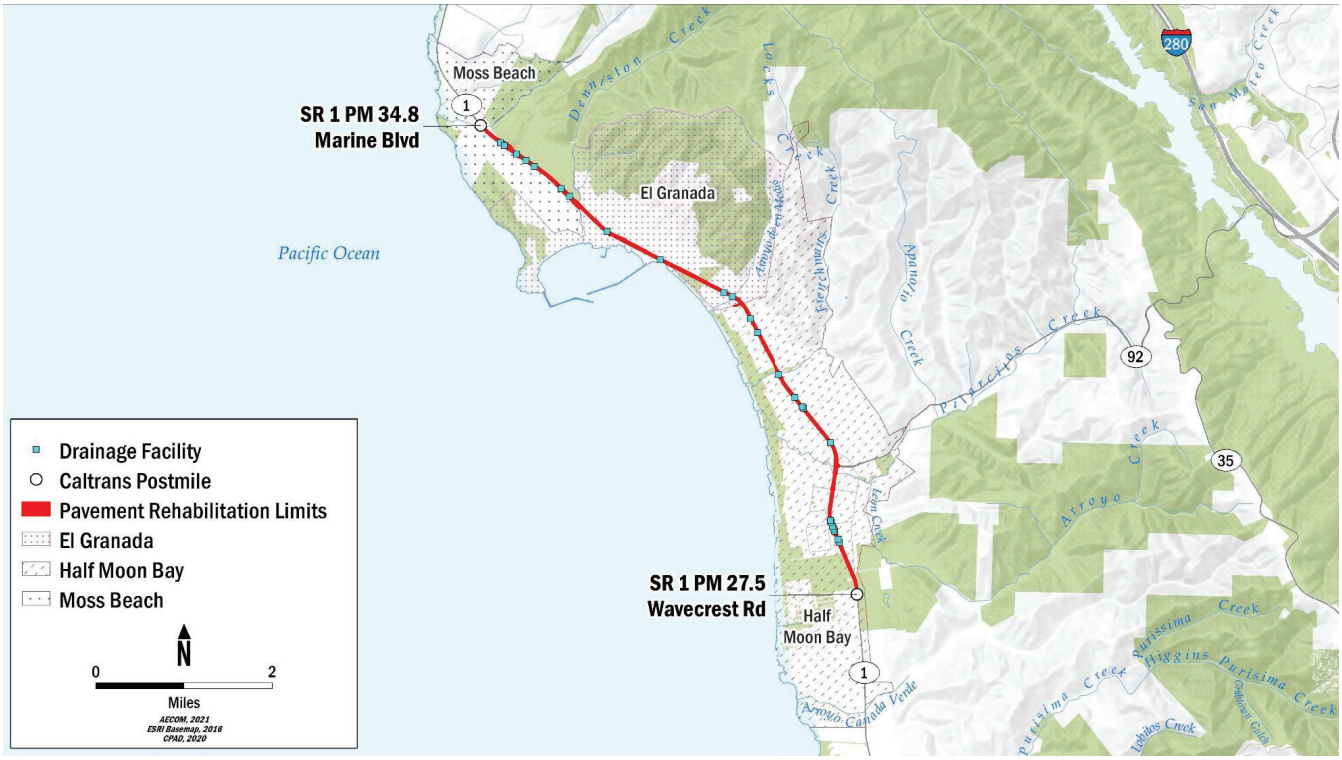

Figure 1-6 Drainage System Improvement Locations

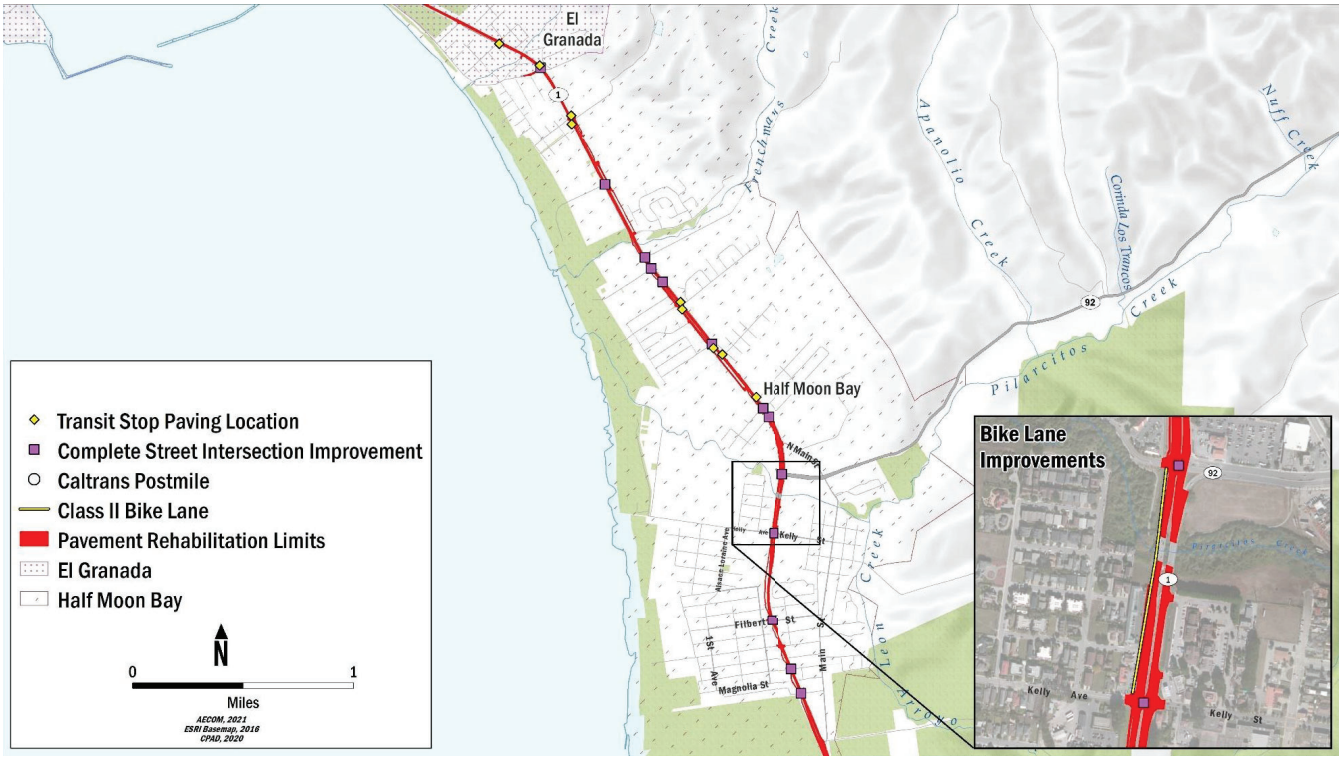

Figure 1-7 Bicycle, Pedestrian, and Complete Streets Improvement Locations

1.4.9.1 Coordination with Local Transportation Plans, and Pedestrian Crossings on SR 1 at Surfer's Beach

Coordination with San Mateo County would occur to complete the medium to long-term improvements that are proposed in the Caltrans-funded SR 1 Safety and Mobility Improvement Studies (http://planning.smcgov.org/highway-1-safety-and-mobility-study) and the County of San Mateo's Connect the Coastside, San Mateo County Midcoast Comprehensive Transportation Management Plan, Final Draft October 2021 (hereafter referred to as Connect the Coastside Plan), available online at: https://planning.smcgov.org/connect-coastside (San Mateo County 2021). At a meeting held in July 2022, the San Mateo County Board of Supervisors adopted the Connect the Coastside Plan. Caltrans will continue to coordinate with the County of San Mateo and local stakeholders on pedestrian crossings on SR 1 at Surfer's Beach in the community of El Granada, as recommended in the Connect the Coastside Plan (see Connect the Coastside Plan, Map 14: Recommended Infrastructure Improvements El Granada, Page 109; https://planning.smcgov.org/sites/planning.smcgov.org/files/Connect%20the%20Coastside%20Final%20Draft_Oct%202021.pdf [San Mateo County 2021]).

1.4.10 Utility Relocation

Existing utilities may need to be relocated during construction. Specific utilities that would need relocation would be determined during the Project's final design phase. Some utilities may require vegetation clearance and excavation during construction.

1.4.11 Construction Staging

Caltrans would locate staging for construction within its right-of-way, outside environmentally sensitive areas (ESAs). At all staging locations, appropriate measures would be implemented to avoid and minimize impacts on environmental resources to the greatest extent feasible. Staging locations would be determined during the Project's final design phase.

1.4.12 Project Schedule

The Project currently is in the conceptual phase, during which Caltrans is refining its conceptual design and completing the environmental review under CEQA. Table 1-1 summarizes the major Project delivery milestones and their targeted delivery dates.

Table 1-1 Proposed Project Schedule

Project Milestone	Milestone Description	Target Date
Draft Environmental Document Completion	Draft Environmental Document to be circulated for public review and comment	July 2022
Project Approval and Environmental Document Completion	Final Project Approval and Environmental Document to be filed with the State Clearinghouse	October 2022
Ready to List Date	Final design plans, specifications, bid estimates, and environmental permitting to be completed	April 2024
Contract Approval	Construction to start	October 2024
Contract Acceptance	Construction to be completed	October 2026

1.4.13 Project Funding

The Project is eligible for federal-aid funding. It is funded by the State Highway Operation and Protection Program for fiscal year 2023/2024. The total Project cost estimate is $45,971,000, which includes both capital costs and capital outlay support costs.

1.5 Alternatives

The Build Alternative described in Section 1.4 is the only alternative considered in this analysis that meets the Project's purpose and need.

The No-Build Alternative would not rehabilitate the existing pavement. The No-Build Alternative would not meet the Project purpose and need because the condition of the pavement and highway appurtenances would continue to deteriorate and would require frequent maintenance and extensive repairs. In addition, the No-Build Alternative eventually would result in greater expense and necessitate major reconstruction. The No-Build Alternative is considered here as a baseline condition to the proposed alternative.

1.5.1 Identification of a Preferred Alternative

Once the public circulation period concluded, formal comments from the public and reviewing agencies were considered, and the Project Development Team (PDT) identified a preferred alternative.

Caltrans received no new substantive information leading to the identification of new alternatives that meet the scope, need, and purpose of the Project; and no new environmental impacts or environmental impacts more severe than those disclosed in the IS were identified during the public review and comment period (see Appendix F for public comments and Caltrans' responses). Additionally, Caltrans did not receive any new information to substantially change Caltrans' environmental commitments record for the Project (Appendix C). Accordingly, on August 29, 2022, the PDT identified the Build Alternative as the Preferred Alternative.

The Build Alternative was identified as the preferred alternative because it:

- meets the Project's purpose and need;
- would reduce expenditure of state resources over the long term by substantially reducing long-term maintenance efforts; and
- would improve facility conditions and reduce safety risks to users and the owners of adjacent properties.

The No-Build Alternative was not identified as the preferred alternative because it:

- does not meet the Project's purpose;
- would require a greater amount of state resources to be expended over the long-term for facility maintenance; and
- would have resulted in continued degradation of facility conditions and increased risks to users.

1.6 Alternatives Considered but Eliminated from Further Discussion Prior to the Draft Initial Study

A variant of the Project's pavement rehabilitation strategy considered a 40-year flexible rehabilitation pavement strategy that would install a new structural section to replace the existing road layers instead of cold plaining and rehabilitating the existing roadway. However, this pavement rehabilitation strategy variant would result in a substantially greater disturbed soil area because the total thickness of the existing structural layers would be less than that of those proposed at most locations. Because of the high risk of increased impacts and mitigation for a larger soil disturbance area, and a higher combined total Project cost, this pavement rehabilitation strategy was eliminated from consideration.

A variant of the Build Alternative that included variable message signs placed at four locations on SR 1 and at one location on SR 92 was considered in the Project's conceptual design. The variable message signs were removed from the Project's design and consideration in the Build Alternative. Removal of these elements was based on preliminary feedback to Caltrans from local community stakeholder groups and input from regulatory agency partners on this element.

1.7 Project Features

The Project would include standard features that are part of most Caltrans projects, in accordance with standard specifications, state and federal laws, and anticipated standard environmental permit conditions; they have not been developed in response to any specific potential Project environmental impact. Project features are distinguished from avoidance and minimization measures that directly relate to potential Project-related impacts. Project-specific avoidance and minimization measures are discussed in Chapter 2 for each environmental resource analyzed. Table 1-2 summarizes standard features applicable to the Project.

Table 1-2 Project Features

Resource	Feature	Description
Aesthetics/Visual	PF-VIS-01	**Limit Visual Impacts during Construction.** The California Department of Transportation (Caltrans) would implement the following measures to the greatest extent feasible during construction: • Tree and shrub removal will be avoided. • Trees and shrubs outside of clearing and grubbing limits will be protected from the contractor's operations, equipment, and materials storage. • All disturbed ground surfaces will be restored and treated with erosion control, including native, locally appropriate seed. • During construction operations, unsightly material and equipment in staging areas will be placed where they are less visible and/or covered where possible. • Construction activities will limit all construction lighting to within the area of work and use directional lighting, shielding, and other measures as needed to avoid light trespass in residential areas.

Resource	Feature	Description
Air Quality	PF- AQ-01	**Control Measures for Construction Emissions of Fugitive Dust.** Dust control measures would be implemented to minimize airborne dust and soil particles generated from graded areas. For disturbed soil areas, the use of an organic tackifier to control dust emissions would be included in the construction contract. Watering guidelines would be established by the contractor and approved by the Caltrans resident engineer. Any material stockpiles would be watered, sprayed with tackifier, or covered to minimize dust production and wind erosion.
Air Quality	PF-AQ-02	**Air Pollution Control.** Caltrans Standard Specifications Section 14-9.02, Air Pollution Control, requires contractors to follow all air pollution control rules, regulations, ordinances, and statutes.
Air Quality	PF-AQ-03	**Emissions Reduction**. Caltrans Standard Specifications Section 7 1.02A and 7 1.02C, Emissions Reduction, require contractors to comply with all laws applicable to the Project and to certify they are aware of and would comply with all California Air Resources Board (ARB) emission reduction regulations.
Biological	PF-BIO-01	**Worker Environmental Awareness Training.** Construction personnel will attend a mandatory environmental education program delivered by the United States Fish and Wildlife Service (USFWS)-Approved Biological Monitor prior to taking part in site construction, including fence installation and other ground-disturbing and/or vegetation clearing activities. The program will focus on the conservation measures that are relevant to an employee's personal responsibility and will include an explanation of how to best avoid take of listed species. At a minimum, the training will include a description of the listed species that may occur on site; how they might be encountered in the Project construction zone; their status and protection; and the relevant Conservation Measures and Terms and Conditions of the Biological Opinion. A fact sheet conveying this information will be prepared and distributed to all construction and Project personnel. Distributed materials will include cards with distinctive photographs of the species, compliance reminders, and relevant contact information. Documentation of the training, including sign-in sheets, will be kept on file and made available to the USFWS on request.

Resource	Feature	Description
Biological	PF-BIO-02	**Environmentally Sensitive Area (ESA) Fencing.** Before the start of construction, ESAs (defined as areas containing sensitive habitats adjacent to or in construction work areas for which physical disturbance is not allowed) will be clearly delineated using temporary high-visibility fencing or temporary reinforced silt fences with high-visibility fabric on top (Type 1). Construction work areas will include the active construction site and all areas providing support for the Project, including areas used for vehicle parking; equipment and material storage and staging; and access roads. The fencing will remain in place throughout the duration of construction activities, be inspected regularly, and be fully maintained at all times. The final Project plans will show all locations where the fencing will be installed and will provide installation specifications. The bid solicitation package special provisions will clearly describe acceptable fencing material and prohibited construction-related activities, including vehicle operation; material and equipment storage; access roads; and other surface-disturbing activities in ESAs.
Biological	PF-BIO-03	**Inclement Weather Restriction**. No work will occur during or within 24 hours following a rain event exceeding 0.2 inch, as forecast by the National Oceanic and Atmospheric Administration National Weather Service for Half Moon Bay, California (C3295) base station. USFWS/ California Department of Fish and Wildlife (CDFW) approval to continue work during or within 24 hours of a rain event will be considered on a case-by-case basis.
Biological	PF-BIO-04	**Light Restrictions**. Construction personnel will turn portable tower lights on no more than 30 minutes before the beginning of civil twilight, and off no more than 30 minutes after the end of civil sunrise. Portable tower lights will have directional shields attached to them, and personnel will only direct lights downward and toward active construction and staging areas. Lighting per portable tower light will not exceed 2,000 lumens. To the extent practicable, personnel will only use enough coverage to light the work areas.
Biological	PF-BIO-05	**Staging**. Staging and parking areas will be restricted to designated areas, as specified by the Project biologist in coordination with the Project engineer.
Biological	PF-BIO-06	**Soil Storage.** Imported soil or native topsoil may be stored in a designated location, as specified by the Project biologist in coordination with the Project engineer, until Project completion.
Biological	PF-BIO-07	**Vegetation Removal.** Vegetation removal will be limited to the designated work areas needed for access and workspace. Where possible, vegetation removal in temporary work areas will be cut above soil level to promote revegetative growth of established plants following construction.

Resource	Feature	Description
Biological	PF-BIO-08	**Replant, Reseed, and Restore Disturbed Areas.** Caltrans will restore temporarily disturbed areas to their preconstruction contours and functions to the maximum extent practicable. Exposed slopes and bare ground will be reseeded with native, local grasses and shrubs to stabilize and prevent erosion. Where disturbance includes the removal of trees and woody shrubs, coordination with the appropriate permitting agency will be warranted, and planting may be required. A local hydroseed mix will be proposed in the plans, specifications, and estimates phase.
Biological	PF-BIO-09	**Migratory Bird Treaty Act.** To minimize and avoid take of migratory birds, their nests, and their young, Caltrans will conduct vegetation and tree trimming from October 1 through January 31—before Project construction—when possible. This work will be limited to vegetation and trees that are within the Project footprint. No grubbing or other ground-disturbing work will occur at this time. Upon completion of vegetation and tree trimming, Caltrans will install stormwater and erosion control best management practices (BMPs). During the nesting season (February 15 through September 30), a qualified biologist with appropriate construction and species experience will conduct nest and bird surveys and other wildlife surveys prior to tree removal and applicable pruning. All work will be conducted under a Regional Water Quality Control Board (RWQCB)-approved Water Pollution Control Plan or Storm Water Pollution Protection Plan. During the nesting season, pre-construction surveys for nesting birds will be conducted by a qualified biologist no more than 72 hours prior to the start of construction activities. If work is to occur within 300 feet of active raptor nests or 50 feet of active other migratory/nongame bird nests, a nondisturbance buffer will be established at a distance sufficient to minimize disturbance, based on the nest location, topography, cover, the species' sensitivity to disturbance, and the intensity/type of potential disturbance. All clearing and grubbing of woody vegetation will be performed by hand or using light construction equipment, such as backhoes and excavators.
Biological	PF-BIO-10	**Invasive Species Management.** To reduce the spread of invasive nonnative plant species and minimize the potential decrease of palatable vegetation for wildlife species, Caltrans will comply with Executive Order 13112. The purpose of this order is to prevent the introduction of invasive species and provide for their control to minimize economic, ecological, and human health impacts. In the event that high- or medium-priority noxious weeds, as defined by the California Department of Food and Agriculture or the California Invasive Plant Council, are disturbed or removed during construction-related activities, the contractor will contain the plant material associated with these noxious weeds and will dispose of it in a manner that will not promote the spread of the

Resource	Feature	Description
		species. The contractor will be responsible for obtaining all permits, licenses, and environmental clearances for properly disposing materials. Areas subject to noxious weed removal or disturbance will be replanted with fast-growing native grasses or a native erosion control seed mixture. If seeding is not possible, the area will be covered to the extent practicable with heavy black plastic solarization material until completion of construction. All earthmoving equipment, as well as seeding equipment to be used during Project construction, would be thoroughly cleaned before arriving on the Project site.
Biological	PF-BIO-11	**Implementation of Water Quality/Erosion Control BMPs.** Erosion control BMPs will be developed and implemented to minimize any wind- or water-related erosion, in compliance with the requirements of the RWQCB. Protective measures will include, at a minimum, the following: a. No discharge of pollutants from vehicle and equipment cleaning will be allowed into any storm drains or watercourses. b. Vehicle and equipment fueling and maintenance operations will be kept at least 50 feet away from watercourses, except at established commercial gas stations or established vehicle maintenance facilities. c. Concrete wastes will be collected in washouts, and water from curing operations will be collected and disposed. Neither will be allowed into watercourses. d. Spill containment kits will be maintained on site at all times during construction operations and/ or staging or fueling of equipment. e. Dust control measures will include use of water trucks and dust palliatives to control dust in excavation-and-fill areas; covering temporary access road entrances and exits with rock (rocking); and covering temporary stockpiles when weather conditions require. f. Coir rolls or straw wattles that do not contain plastic or synthetic monofilament netting will be installed along or at the base of slopes during construction to capture sediment. g. Graded areas will be protected from erosion using a combination of silt fences and fiber rolls along toes of slopes or along edges of designated staging areas; erosion control netting (e.g., jute or coir) will be used as appropriate on sloped areas. Erosion control materials that use plastic or synthetic monofilament netting will not be used in the Project footprint. This will include products that use photodegradable or biodegradable synthetic netting, which can take several months to decompose. Acceptable materials will include natural fibers, such as jute, coconut, or twine.

Resource	Feature	Description
Biological	PF-BIO-12	**Construction Site BMPs.** The following site restrictions will be implemented to avoid or minimize impacts on special-status species and their habitats: a. Routes and boundaries of roadwork will be clearly marked before the start of construction or grading. b. All food and food-related trash items will be enclosed in sealed trash containers and will be properly disposed off site. c. No pets belonging to Project personnel will be allowed anywhere in the Project area during construction. d. No firearms carried by Project personnel will be allowed except for those carried by authorized security personnel or local, state, or federal law enforcement officials. e. A spill response plan will be prepared. Hazardous materials (e.g., fuels, oils, or solvents) will be stored in sealable containers in a designated location at least 50 feet from any aquatic features. f. Project-related vehicles will be required to observe a 10-mile-per-hour speed limit in all staging or storage areas.
Biological	PF-BIO-13	**Fish Passage Assessment.** In accordance with Caltrans policy and Senate Bill 857, Caltrans will conduct first-pass fish passage surveys of all unassessed stream crossings in the Project Footprint. The survey results will be provided to the Passage Assessment Database maintained by CDFW.
Cultural Resources	PF-CUL-01	**Discovery of Archaeological Materials.** If archaeological materials are discovered during construction, all earth-moving activity in and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and substance of the find.
Cultural Resources	PF-CUL-02	**Discovery of Human Remains**. If remains are discovered during excavation, all work within 60 feet of the discovery will halt, and Caltrans' Office of Cultural Resources (OCRS) will be called. OCRS staff will assess the remains and, if determined to be human, will contact the County Coroner in accordance with Public Resources Code (PRC) Sections 5097.98, 5097.99, and Section 7050.5 of the California Health and Safety Code. If the Coroner determines the remains to be Native American, the Coroner will contact the Native American Heritage Commission, which will assign a Most Likely Descendant. Caltrans will consult with the Most Likely Descendent on treatment and reburial of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Resource	Feature	Description
Greenhouse Gas (GHG)	PF-GHG-01	**Emissions Reduction.** Caltrans Standard Specifications Sections 7-1.02A and 7-1.02C, Emissions Reduction, require contractors to comply with all laws applicable to the Project and to certify they are aware of and will comply with all ARB emission reduction regulations.
Hazardous Materials	PF-HAZ-1	**Unanticipated Hazardous Waste.** Caltrans standards will be followed for the proper handling and disposal of any unanticipated hazardous waste discovered during construction.
Hazards and Hazardous Materials	PF-HAZ-02	**Aerially Deposited Lead (ADL).** The Project will implement BMPs according to Caltrans specifications special provision 12-11.09, “Minimal Disturbance of Regulated Material Containing ADL.”
Hydrology and Water Quality	PF-WQ-1	**Water Quality BMPs.** The potential for adverse effects to water quality will be avoided by implementing temporary and permanent BMPs outlined in Section 7-1.01 G of the Caltrans Standard Specifications. Caltrans erosion control BMPs will be used to minimize any wind or water related erosion. The State Water Resources Control Board has issued a National Pollutant Discharge Elimination System Statewide Storm Water Permit to Caltrans to regulate stormwater and nonstormwater discharges from Caltrans facilities. A Water Pollution Control Plan will be developed for the Project because one is required for all projects that have less than 1 acre of soil disturbance.

1.8 Necessary Permits and Approvals

Table 1-3 summarizes the permits, licenses, agreements, and certifications that would be necessary for Project construction.

Table 1-3 Necessary Project Permits and Approvals

Agency	Permit, License, Agreement, or Certification	Status
California Department of Fish and Wildlife	California Fish and Game Code Section 1602 Lake or Streambed Alteration Agreement	Consultation is ongoing.
City of Half Moon Bay	Coastal Development Permit, or exemption from Coastal Development Permit requirements	The Project is partially within the Coastal Zone area that is governed by City of Half Moon Bay's Local Coastal Program, and Coastal Development Permit jurisdiction. Application submittal is anticipated during the detailed design phase.
San Mateo County	Coastal Development Permit, or exemption from Coastal Development Permit requirements	The Project is partially within the Coastal Zone area that is governed by San Mateo County's Local Coastal Program, and Coastal Development Permit jurisdiction. Application submittal is anticipated during detailed design phase.
California Coastal Commission	Federal Coastal Consistency Certification or Waiver	The Project is partially within the Coastal Zone area that is outside of Local Coastal Programs and governed by the Coastal Commission. Review is anticipated to be concurrent with Coastal Development Permit requests through Local Agencies. Any Coastal Development Permit issued by local agencies is appealable to the California Coastal Commission (Public Resources Code Section 20603)
San Francisco Regional Water Quality Control Board	Federal Clean Water Act Section 401 Water Quality Certification	Request to be prepared during detailed design phase.
United States Army Corps of Engineers	Federal Clean Water Act Section 404, and Rivers and Harbors Act Section 10 Permit	Nationwide Permit No. 14 or Regional General Permit No. 33 to be requested during detailed design phase.

Agency	Permit, License, Agreement, or Certification	Status
United States Fish and Wildlife Service	Federal Endangered Species Act Section 7 consultation for threatened and endangered species	Consultation ongoing.

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Chapter 2 California Environmental Quality Act Evaluation

2.1 Determining Significance under CEQA

The Project is subject to state environmental review requirements. Project documentation has been prepared in compliance with CEQA. Caltrans is the lead agency under CEQA. This chapter evaluates potential environmental impacts of the Project, as described in Chapter 1, related to the CEQA checklist to comply with the state CEQA guidelines (Title 14, California Code of Regulations, Division 6, Chapter 3, Section 15091).

2.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that may be affected by the Project. In many cases, background studies performed in connection with a project will indicate that no impacts would occur on a particular resource. The words “significant” and “significance” used throughout the following sections are related to CEQA, not to the National Environmental Policy Act (NEPA), impacts. The questions in the checklist are intended to encourage a 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 most Caltrans projects, such as best management practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions—are an integral part of the Project and have been considered before any significance determinations documented herein (see Section 1.7 for a detailed discussion of these features). This checklist incorporates by reference the information that is presented in Chapter 1 .

2.2.1 Aesthetics

Except as provided in Section 21099 of the Public Resources Code (PRC), would the Project:

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

2.2.1.1 CEQA Significance Determinations for Aesthetics

Responses to the following questions are based on Caltrans' Visual Impact Assessment for the Project (Caltrans 2022b).

a) Would the Project have a substantial adverse effect on a scenic vista?

A scenic vista is a viewpoint of natural scenery, historic, and/or architectural features possessing visual qualities of value to the community. A vista typically refers to expansive views, usually from an elevated and open area. Certain stretches of SR 1 have scenic vistas, and those scenic qualities have been considered during Project development to avoid substantial adverse effects on scenic vistas. The Project would not affect scenic vistas along SR 1 or SR 92. There would be no impact, and no additional mitigation is required.

b) Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?

SR 1 within the Project limits is not a designated State Scenic Highway. Consequently, the Project would not substantially degrade scenic resources within a State Scenic Highway. SR 1 is eligible for scenic designation, and avoidance and minimization measures have been taken to minimize Project-related visual impacts to the Project corridor.

c) Would the Project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?

Caltrans has considered potential visual impacts in its design approach and would implement standard project features to avoid and minimize visual and aesthetic impacts from the overall Project, as summarized in Section 1.7 (Table 1-2).

Although the Project area is not a State Scenic Highway, its scenic character is protected by the Coastal Act and other applicable plans, which are elaborated on in Section 2.2.11. In the Coastal Zone, the scenic qualities of Highway 1 are protected under sections 30251 and 30254 of the Coastal Act.

Most of the Project along the 7.3-mile corridor would result in visual change, including roadway rehabilitation, Complete Streets improvements, drainage improvements, and upgrades to traffic operations and safety elements. With implementation of Project features incorporated into the Project design, the impact would be less than significant.

d) Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Project's guard rails could create glare that may cause a minor visual impact where they are replaced and installed. The impact would be less than significant. No additional mitigation is required.

Proposed Avoidance and Minimization Measure

VIS-01, Guardrail Finish. To reduce glare, Caltrans will include a matte finish on exposed metal surfaces of guard rails.

2.2.2 Agriculture and Forest Resources

In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (DOC 1997), prepared by the California Department of Conservation (DOC) as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on 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 (ARB).

Question	CEQA Determination
a) Would the Project 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) Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact
d) Would the Project result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Would the Project 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

2.2.2.1 CEQA Significance Determinations for Agriculture and Forest Resources

a), b), c), d), and e)

Caltrans has reviewed current mapping data provided by the DOC (2022) and confirmed that no Farmland of Statewide Importance is in or adjacent to the Project area. The Project area is not in but is adjacent to Unique Farmland and Prime Farmland at some locations. However, the Project area would be limited to the existing right-of-way at these locations and would not convert adjacent lands. The Project area does not contain land zoned for agricultural uses; land under the Williamson Act; or land zoned as forest land, timber land, or timberland production. No loss or conversion of forest land to non-forest land would occur, nor any other changes to the existing environment that would convert farmland to nonagricultural use or forest land to non-forest use. Therefore, no impact would occur.

2.2.3 Air Quality

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

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

2.2.3.1 CEQA Significance Determinations for Air Quality

a) Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The Project area is in the San Francisco Bay Area Air Basin and is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), ARB, the San Mateo County General Plan (San Mateo County 1986), and the San Mateo County Local Coastal Program (LCP) (San Mateo County 2013b). San Mateo County is in a nonattainment zone for 8-hour ozone (2015) and particulate matter equal to or less than 2.5 microns in diameter (2006), according to federal 2021 standards (U.S. EPA 2021e).

The Project is exempt from the federal requirement to determine project-level air quality conformity, in accordance with 40 Code of Federal Regulations (CFR) 93.126–Exempt Projects-Pavement resurfacing and/or rehabilitation. An exempt project generally is considered as having no impact on air quality with respect to the region's ability to meet air quality standards. The Project would not add capacity, and therefore would not result in operational degradation of air quality. The Project is anticipated to result in short-term emissions during construction, but air pollutants are expected to be minimal to negligible. Construction practices would conform to the performance standards outlined in the applicable plans and Caltrans standards specifications. The Project would not conflict with or obstruct implementation of the pertinent air quality policies and goals of these agencies. No impact would occur.

b) Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard?

The Project would not increase capacity on SR 1 or SR 92 and would not cause long-term degradation of air quality because of additional traffic, which could be cumulatively considerable. During Project construction, short-term emissions would occur from the use of diesel and gasoline-powered construction equipment and vehicles. However, these short-term

emissions would not result in a cumulatively considerable net increase of criteria pollutants. No impact would occur.

c) Would the Project expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors include children, the elderly, people with asthma, and other members of the population who are at a heightened risk of negative health outcomes from exposure to air pollution. Schools, childcare facilities, hospitals, nursing homes, and residential communities are locations where sensitive receptors typically occur. Although schools (Picasso Preschool, Wilkinson School, El Granada Elementary School, La Costa Adult School, and Hatch Elementary School), childcare facilities (Cottage by the Sea Childcare and Izzi at Half Moon Bay), and hospitals (Seaton Coastside and Coastside Clinic) are nearby, the Project would not increase emissions of criteria pollutants or mobile source air toxics above existing conditions. Although construction activities would impact nearby sensitive receptors, generation of air emissions would be temporary and limited to the period of construction. In addition, implementation of Project features PF-AQ-01, PF-AQ-02, and PF-AQ-03, listed in Table 1-2, would minimize impacts from emissions during the construction phase. Therefore, the impact would be less than significant.

d) Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Typical odors associated with construction equipment and repaving may be present temporarily. However, the Project would not lead to long-term emissions, such as odors, that would adversely affect a substantial number of people. No impact would occur.

2.2.4 Biological Resources

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

2.2.4.1 CEQA Significance Determinations for Biological Resources

Responses to the following questions are based on Caltrans' Natural Environment Study for the Project, prepared in April 2022 (Caltrans 2022c). Potential wetlands, other waters of the United States, and waters of the state regulated by the United States Army Corps of Engineers and the Regional Water Quality Control Board (RWQCB); and riparian areas and Coastal Zone wetlands regulated by the California Coastal Commission (CCC) were mapped in the Biological Study Area (BSA) for the September 2021 aquatic resource jurisdictional delineation report (Caltrans 2021h).

As defined in the NES (Caltrans 2022c), the BSA consists of the Project footprint (permanent or temporary impact areas, including staging and access areas), along with buffer areas (surrounding the Project footprint) that construction activities may directly or indirectly impact. The buffer areas were estimated based on the potential for Project activities to cause noise, water quality, or geomorphological impacts.

Vegetation was mapped and described based on field surveys at water crossings and areas subject to off-pavement disturbance. In all other parts of the BSA, vegetation was mapped using a combination of aerial imagery and street view imagery. Vegetation was mapped to the vegetation alliance level using the California Native Plant Society Manual of California Vegetation (CNPS 2021) classification system where possible. For vegetation communities

that could be consistently identified to the association level throughout the BSA, the vegetation association was also recorded in the vegetation habitat descriptions. The presence of invasive species, defined as those included on the California Invasive Plant Council (Cal-IPC 2021) inventory of invasive plants, was noted for vegetation communities on the field surveys.

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

The Project would have less-than-significant impacts. The Project's BSA contains potential habitat for special-status species that have moderate to high potential to occur. Appendix B contains a summary table of the potential for special-status species to occur, based on literature/database searches, biological surveys, evaluation of appropriate habitat, and the habitat and life history requirements for each species. The Project footprint overlaps with areas that are designated as Essential Fish Habitat (EFH) by the National Oceanic and Atmospheric Administration (NOAA) Fisheries.

The following federally and state-listed fish and wildlife species are either known to occur in or have the potential to occur in the BSA:

Federally and State-Listed Species

- Steelhead (*Oncorhynchus mykiss irideus*), Central California Coast Distinct Population Segment (DPS), federally endangered, and stated endangered
- Coho salmon (*Oncorhynchus kisutch*), Central California Evolutionarily Significant Unit (ESU), federally threatened
- California red-legged frog (*Rana draytonii*), federally endangered, state species of special concern
- San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), federally endangered, state endangered, and state fully protected species

Caltrans, in consultation with the United States Fish and Wildlife Service (USFWS), has determined that the Project may effect, and is likely to adversely affect, the California red-legged frog and the San Francisco garter snake. Caltrans, as the lead federal action agency, has determined that the Project would have no effect on Steelhead and Coho Salmon. A summary of consultation with USFWS pursuant to the federal Endangered Species Act (FESA) is provided in Section 3.1.

Special-Status and Locally Rare Species

- Ornduff's meadowfoam (*Limnanthes douglasii* ssp. *ornduffii*), California Rare Plant Rank (CRPR) 1B.1 (plants that are rare, threatened, or endangered in California and elsewhere; seriously threatened in California)
- Protected and migratory birds

The potential impacts to the special-status wildlife and plants listed above are described in the following paragraphs.

Steelhead

The Central California Coast DPS of steelhead is a federally threatened species (62 Federal Register [FR] 43937, August 18, 1997). Central California Coast steelhead DPS includes all naturally spawned anadromous populations below natural and manmade impassable barriers in California streams from the Russian River (inclusive) to Aptos Creek (inclusive); and the drainages of San Francisco, San Pablo, and Suisun Bays, eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers (71 FR 834, January 5, 2006).

Caltrans reviewed existing data and reports to assess the status and potential occurrence of steelhead in the BSA. Steelhead likely occupy Denniston and Frenchman's Creeks, are known to occupy Pilarcitos Creek, and are unlikely to occupy Deer and Arroyo de en Medio Creeks (Becker and Reining 2008). Denniston Creek, Frenchmen's Creek, and Arroyo en Medio Creek are designated as critical habitat for Central California Coast steelhead. Caltrans review of the California Natural Diversity Database (CNDDB) indicates recent records of steelhead in Frenchman's Creek. All remaining unnamed drainages in the BSA lack the necessary hydrologic characteristics necessary to support steelhead.

No culvert replacement or other instream work is anticipated at Denniston Creek and Frenchmen's Creek. Work near those two waterways would be limited to guardrail replacement, which may involve vegetation removal from the road shoulder or the trimming of tree branches that overhang the road shoulder. This limited vegetation removal is not expected to result in any decrease in shading or riparian habitat impacts to areas potentially supporting steelhead. Culvert replacement work would occur at Arroyo de en Medio Creek and at unnamed drainages. However, those waterways are not expected to support steelhead, and they all feed directly into the Pacific Ocean and thus are not tributaries to waterways that may support steelhead migration.

Proposed Avoidance and Minimization Measure

Caltrans proposes the following measure to avoid and minimize impacts on steelhead:

> **BIO-01: Riparian Vegetation Protection**
>
> All riparian habitat in the Project area will be delineated as an ESA, and no construction activities will occur outside of the immediate work area in riparian habitat ESAs. At the roadway crossings of Denniston, Frenchman's, and Pilarcitos Creeks, Caltrans will limit riparian vegetation removal to the immediate work area. Trees or shrub trimming at those locations will be limited to removing only branches that overhang the roadway.

Coho Salmon

The Central California Coast ESU was listed as federally endangered in 1996 (61 FR 56138) and is a state endangered species under the California Endangered Species Act (CESA). This ESU includes all naturally spawned Coho salmon, encompassing reaches of all rivers (including estuarine areas and tributaries) between Punta Gorda (Mendocino County) and San Lorenzo River (Santa Cruz County)

No evidence could be found, historical or otherwise, that any of the drainages in the BSA may support Coho salmon (Spence et al. 2012; NMFS 2012). Furthermore, current habitat conditions in the waterways in the BSA are generally incompatible with the species because they lack summer cold water flows, deep pools with abundant cover, and a lagoon suitable for a successful transition to saltwater, all of which the species requires.

California Red-Legged Frog

The California red-legged frog was federally listed as a threatened species under FESA on May 23, 1996, (61 FR 25813; USFWS 1996). On April 16, 2010, USFWS designated revised critical habitat for the California red-legged frog under FESA. Critical habitat for the California red-legged does not occur in the Project area, but does occur within 2 miles of the Project. California red-legged frog is distributed throughout 26 counties in California but is most abundant in the San Francisco Bay area. California populations have become isolated in the Sierra Nevada, North Coast, and the northern and southern Transverse and Peninsular ranges (Jennings and Hayes 1994; Stebbins 2003).

Riverine habitat exists in the Project BSA, and California red-legged frogs can move considerable distances over land. Multiple California red-legged frog occurrences are documented within 2 miles of the Project footprint. The Project's disturbance from construction activities is generally within the existing baseline disturbance of SR 1 in the Project area (e.g., local dense street traffic, visitor activity in adjacent parking lots, gas stations, shopping centers, residential development, bus stops, and ongoing roadway maintenance activities). Agricultural and undeveloped lands that run parallel to SR 1 may provide limited dispersal routes that are free of major barriers to frogs. Roadside drainage ditches along SR 1 may further increase connectivity between other open areas and the BSA. The ditches and associated culverts may provide shelter as well as aquatic habitat during portions of the year. The Project footprint is, however, subject to regular mowing; its value to frogs is likely restricted to frogs dispersing through the area, mostly during inclement weather. Additionally, SR 1 acts as a potential barrier to California red-legged frog. However, there is limited ecological incentive for California red-legged frog to be seeking habitats west of SR 1. Developed urban land throughout the BSA provides additional barriers to dispersal and habitat connectivity.

Much of the Project footprint overlaps areas that are paved or otherwise developed and do not support California red-legged frog. Small areas of potential habitat for California red-legged frog would be permanently and temporarily impacted due to ground disturbance and vegetation removal. The Project's direct temporary impacts on potential habitat are estimated in acreage. Permanent impacts are those that would remove habitat for more than 1 year and temporary impacts are those that would remove habitat for less than 1 year. Impacts to upland/dispersal habitat are based on the maximum estimated ground disturbance throughout the Project footprint. Table 2-1 summarizes potential permanent and temporary impacts on California red-legged frog habitat in the BSA.

The Project removed the construction of sidewalks approaching the Pilarcitos Creek Bridge in Half Moon Bay. This element was anticipated to have minor permanent effects on frog habitat, which were considered in the draft IS. No permanent effects on California red-legged frog are anticipated with this Project change.

Table 2-1 Potential Impacts to California Red-Legged Frog Potential Habitat

Habitat Type	Impact Type	Area (acres)
Aquatic breeding	Permanent	0
Aquatic breeding	Temporary	0
Aquatic nonbreeding	Permanent	0
Aquatic nonbreeding	Temporary	0.03

Upland/dispersal	Permanent	0
Upland/dispersal	Temporary	1.09

The Project has the potential to adversely affect individual frogs that occur at the Project site during construction, through direct interaction with construction activities that may result in injury, mortality, or harassment. The Project is anticipated to cause indirect effects to California red-legged frog through ground disturbance from vegetation removal; equipment and vehicle staging; trampling of vegetation; construction-related dust; increases in noise and light; and impacts to water quality during construction.

Proposed Avoidance and Minimization Measure

Caltrans proposes the following measures to avoid and minimize impacts to California red-legged frog. These measures would also serve to protect San Francisco garter snake because these species occupy the same habitat in the BSA.

BIO-02: Seasonal Avoidance

Construction activities off paved surfaces in areas of potential California red-legged frog habitat (ESAs) will be performed between June 15 and October 15 to minimize impacts on this species. Designated staging areas may be used outside of this work window once cleared by a USFWS-approved biologist or their designee and fenced, as appropriate.

BIO-03: Proper Use of Erosion Control Devices

To avoid entanglement or injury of California red-legged frog or San Francisco garter snake, erosion control materials that use plastic or synthetic monofilament netting will not be used.

BIO-04: Avoidance of Entrapment

To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 1 foot deep will be covered at the close of each working day with plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks at an angle no greater than 30 degrees. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. All replacement pipes, hoses, culverts, or similar structures less than 12 inches in diameter will be closed, capped, or covered upon entry to the Project site. All similar structures greater than 12 inches must be inspected before they are subsequently moved, capped, and/or buried.

BIO-05: Biological Monitor

The names and qualifications of proposed biological monitor(s) will be submitted to the USFWS for approval prior to the start of construction. The USFWS-approved biological monitor(s) will keep a copy of the USFWS biological opinion in their possession when on site. Through communication with the resident engineer, the USFWS-approved biological monitor(s) will be on site during all work that could reasonably result in take of California red-legged frog or other special-status species. The USFWS-approved biological monitor(s) will have the authority to stop work that may result in the unauthorized take of special-status species. If the USFWS-approved biological monitor

exercises this authority, the USFWS will be notified by telephone and e-mail message within one working day.

BIO-06: Pre-Construction/Daily Surveys

Pre-construction surveys for special-status species will be conducted by the USFWS-approved biological monitor no more than 14 calendar days prior to any initial ground disturbance and immediately prior to ground-disturbing activities (including vegetation removal and fence installation) in the Project footprint. These efforts will consist of walking surveys of the Project limits and, if possible, accessible adjacent areas within at least 50 feet of the Project limits. The USFWS-approved biological monitor will investigate potential cover sites when it is feasible and safe to do so. This includes thorough investigation of mammal burrows, rocky outcrops, appropriately sized soil cracks, tree cavities, and debris. Native vertebrates found in the cover sites within the Project limits will be documented and relocated to an adequate cover site in the vicinity, with the exception of fully protected species. Safety permitting, the USFWS-approved biological monitor will also survey areas of disturbed soil for signs of California red-legged frog or San Francisco garter snake within 30 minutes following initial disturbance of the given area. The need for further pre-construction surveys will be determined by the biologist based on site conditions and realized construction timelines.

BIO-07: Protocol for Species Observation

The USFWS-approved biological monitor(s) will have the authority to halt work through coordination with the resident engineer if California red-legged frog or San Francisco garter snake are observed in the Project footprint. The resident engineer will keep construction activities suspended in a 50-foot radius of the California red-legged frog or San Francisco garter snake in any construction area where the biologist has determined that a potential take of the species could occur. Work will resume after observed listed individuals leave the site voluntarily, the biologist determines that no wildlife is being harassed or harmed by construction activities, or the wildlife is relocated by the biologist to a release site using USFWS-approved handling techniques.

BIO-08: Handling of California Red-Legged Frog

If a California red-legged frog is discovered, the resident engineer and USFWS-approved biological monitor will be immediately informed.

- If a California red-legged frog gains access to a construction zone, work will be halted immediately within 50 feet until the animal leaves the site or is captured and relocated by the USFWS-approved biological monitor.
- The USFWS will be notified within one working day if a California red-legged frog or San Francisco garter snake is discovered in the construction site.
- The captured California red-legged frog will be released in appropriate habitat outside of the construction area but near the capture location. The release habitat will be determined by the USFWS-approved biological monitor.
- The USFWS-approved biological monitor will take precautions to prevent introduction of amphibian diseases in accordance with the Revised Guidance

on Site Assessments and Field Surveys for the California Red-Legged Frog (USFWS 2005).

San Francisco Garter Snake

The San Francisco garter snake was federally listed as an endangered species under FESA on March 11, 1967 (32 FR 4001). No critical habitat has been designated. San Francisco garter snake was listed as a state endangered species in 1971 (USFWS 2006) and is listed as a Fully Protected Species under California Fish and Game Code (CFGC) Section 5050. The listing occurred because of San Francisco garter snake habitat loss across the snake's range. The San Francisco garter snake is limited in distribution to portions of San Mateo and Santa Cruz counties.

Caltrans relied on the best available scientific and commercial data, including literature searches and a visual assessment, to evaluate the potential for this species to occur in the BSA and to infer a potential for presence. Caltrans reviewed CNDDB and the online application iNaturalist to determine potential occurrence of San Francisco garter snake in the BSA. San Francisco garter snake were not observed on site during reconnaissance site visits, and a protocol-level survey was not conducted for this Project.

Eleven recorded occurrences of San Francisco garter snake exist within 2 miles of Project BSA locations. Three observations are known to be extirpated, and all but one are precluded from occurring in the BSA by barriers such as the SR 1 concrete median, residential development, or distance from the Project area. Potential habitat for San Francisco garter snake in the BSA is marginal. Paved surfaces, graveled shoulders, and regularly mowed areas do not provide the physical or biological elements required to support San Francisco garter snake in any of its life stages. It is unlikely that San Francisco garter snake individuals could occur in the Project area where work is proposed.

Small areas of potential habitat for San Francisco garter snake would be temporarily impacted due to ground disturbance and vegetation removal. Project impacts are quantified in acreage. Permanent impacts are those that remove habitat for more than 1 year, and temporary impacts are those that remove habitat for less than 1 year. Impacts to upland/dispersal habitat are based on the maximum estimated ground disturbance in the Project footprint. Table 2-2 provides an estimate of impacts to different types of potential San Francisco garter snake habitat.

Table 2-2 Impacts to San Francisco Garter Snake Potential Habitat

Habitat Type	Impact Type	Area (acres)
Aquatic breeding	Permanent	0
Aquatic breeding	Temporary	0.03
Upland/dispersal	Permanent	0
Upland/dispersal	Temporary	1.09

The Project removed the construction of new sidewalks adjacent to SR 1 approaching the Pilarcitos Creek Bridge in Half Moon Bay. This element was anticipated to have minor permanent impacts on San Francisco garter snake upland dispersal habitat, which were

considered in the draft IS. No permanent impacts on San Francisco garter snake are anticipated with this Project change.

Special-Status Plant Species

There is currently one plant species that is known to or likely to occur in the BSA. Other special-status plant species were determined to have little or no potential to occur in the BSA. Initial reconnaissance surveys did not discover any special-status plant species, but the surveys were not appropriately timed to determine the presence of rare plants with potential to occur in the BSA. Several special-status plants (defined here as plants ranked CRPR 1A, 1B, 2A, or 2B2, as well as state and federally listed species) have potential to occur in the BSA and have known occurrences mapped nearby, but would not have been detectable at the time of survey. A rare plant survey prior to final Project design is required to determine the presence of and potential impacts on any listed plant species.

Ornduff's meadowfoam, a CRPR 1B.1 special-status plant, was identified in the BSA during a follow up survey in March 2022. Ornduff's meadowfoam is an annual plant only known to occur the area between Half Moon Bay and Moss Beach. The species was initially identified in 1998 in an agricultural field at that location. The core of this species' population grows densely over an area of approximately 18 acres (Buxton 2013). Repeated attempts to locate this species elsewhere in California have not been successful (Buxton 2013).

Ornduff's meadowfoam is a winter annual that germinates in the fall. Flowering and fruiting occur simultaneously through the winter and early spring (Buxton 2013). The species currently occupies low-lying portions of an agricultural field, along with adjacent drainage ditches and ruts. The field is plowed annually, which reduces competition; the species completes its life cycle during the time when the field is fallow.

An area of agricultural cropland adjacent to SR 1 supports the only known population of this plant. The population appears to be thriving in the constant disturbance regime and moist soil conditions in the agricultural field where it occurs. During a site visit on April 15, 2022, a botanist identified Ornduff's meadowfoam occurring on both sides of the freeway where it is known to occur. Caltrans previously assessed potential drainage work in this area. Poor drainage of the agricultural croplands in the BSA is likely a contributing factor to the moderately moist soil (i.e., mesic) conditions associated with this plant population. To avoid impacts to this newly discovered population, Caltrans eliminated the drainage work considered at this location from the Project.

A substantial change in soil moisture regime may eradicate Ornduff's meadowfoam where it occurs in the BSA and may have an adverse impact on the only known population of this species. Avoidance and minimization measure BIO-11 will prevent drainage system work adjacent to SR 1 that could impact the area that supports, or contributes hydrologically to, this population. PF-BIO-02/AMM BIO-13 will establish an ESA for further protection. Impacts to special-status plant species would be less than significant; no mitigation is proposed or required with implementation of the Project features and avoidance and minimization measures proposed.

Proposed Avoidance and Minimization Measures

Caltrans will implement the following avoidance and minimization measures to protect special-status plants prior to construction:

BIO-09 Rare Plant Survey

Caltrans will conduct a rare plant survey in the BSA to determine the presence or absence of special-status plant species. To ensure that surveys are conducted at an appropriate time to identify all the target species, as many as three survey replicates will be performed. The survey replicates will be timed based on target species blooming periods and rainfall levels, but are targeted to occur in March, late April/May, and June of 2022. All plants will be identified to a level needed to verify protected status. Any listed plants discovered in the field will be mapped and included as ESAs in the final plans and specifications. Caltrans will consult with the appropriate wildlife agency with jurisdiction and will obtain necessary permits or authorizations if unavoidable take of a listed plant species incidental to the proposed work would occur.

BIO-10 Pre-Construction Plant Survey

A Project biologist with appropriate botany experience will perform a site survey in ESAs where construction disturbance could occur before start of work. Special-status plants will be flagged and avoided where possible. Caltrans will coordinate with appropriate wildlife agencies with jurisdiction prior to construction if incidental take of a listed plant species is unavoidable, and will obtain any necessary permits or authorizations for direct impacts. Caltrans will adhere to the requirements of all permits and authorizations issued for the Project.

BIO-11 Drainage Work Exclusion for Ornduff's Meadowfoam

Caltrans will avoid drainage system rehabilitation or other work in unpaved areas that could affect soil hydrology within 3,000 feet of where Ornduff's meadowfoam is known to occur. If Caltrans later determines that rehabilitating the drainage system at this location is necessary, it will complete a soil hydrology study, drainage system design, and mitigation plan in coordination with the California Department of Fish and Wildlife (CDFW) that results in no net loss of this species or its habitat.

Essential Fish Habitat

No evidence could be found, historical or otherwise, that Pilarcitos Creek or any of the other smaller drainages (such as Denniston or Frenchman's Creeks) in the BSA may support Coho salmon (Spence et al. 2012; NMFS 2012). Furthermore, current habitat conditions in the waterways in the BSA are generally incompatible with the species because they lack summer cold water flows, deep pools with abundant cover, and a lagoon suitable for a successful transition to saltwater, all of which the species requires. Because Pilarcitos Creek may have historically supported Coho salmon, it is designated as EFH under the Pacific Coast Salmonid Fisheries Management Plan. Pilarcitos Creek is not expected to provide spawning areas for Coho.

No culvert replacement or other instream work would occur at Pilarcitos Creek where EFH is present. Work near this waterway would be limited to guardrail replacement in upland habitat, which may involve vegetation removal from the road shoulder or the trimming of tree branches that overhang the road shoulder. This limited form of vegetation removal is not expected to result in any decrease in shading or other forms of riparian habitat contribution to areas potentially supporting salmon. As a result, the Project would have no impacts to EFH.

b) Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The Project would have less-than-significant impact. Vegetation in the BSA is relatively common, with sensitive communities being limited to wetlands and other waters of the United States and waters of the state. The creek corridors at the creek crossings in the BSA consists of a vegetation type dominated by tall red alder (*Alnus rubra*) trees, and dense arroyo willow (*Salix lasiolepis*) and red willow (*Salix laevigata*) stands.

Approximately 4.3 acres of riparian woodlands occur in the Project's BSA. The Project is currently estimated to have temporary impacts to less than 0.44 acre of CCC jurisdictional riparian areas. The Project does not anticipate permanent impacts to CCC riparian areas. Implementation of Project Feature PF-BIO-08 would address temporarily impacted areas, and a final revegetation and planting plan will be completed during the final design phase. Specific impacts would be estimated during the application for a Coastal Development Permit from the LCP or CCC.

Construction work in the perennial and intermittent creek up to the top of bank, and any contiguous adjacent riparian habitat, also would require a CFGC Section 1602 Streambed Alteration Agreement from CDFW.

Caltrans would implement Project features and the avoidance and minimization measures proposed in response to the following question that would benefit riparian habitat and sensitive natural communities within the Project area. Additionally, the measure proposed for steelhead, BIO-01, would also minimize impacts to riparian habitat.

c) Would the Project 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?

The Project would have a less-than-significant impact. The Project's construction activities have the potential to impact wetlands and waters directly and indirectly in the BSA. Project actions that could cause temporary impacts to waters of the United States and waters of the state include construction access and work in the wetlands for culvert replacement.

Permanent impacts to wetlands and waters of the United States would be avoided because the new drainage system elements would be rehabilitated entirely within the footprint of the existing elements. The Project would result in temporary impacts to jurisdictional areas. No permanent impacts to wetlands and other waters is anticipated. The Project has potential to temporarily impact less than 0.001 acre of wetlands, less than 0.02 acre of other waters, and less than 0.02 acre of culverted waters of the United States.

The Project would have no permanent impacts on wetlands or waters that are state jurisdictional only. The Project would have relatively minimal temporary impacts on other waters of the state, including less than 0.03 acre of other waters and less than 0.02 acre of culverted other waters.

Specific impacts in Project area will be estimated to obtain all necessary state and federal permits for the Project during the final design phase. The Project is proposing avoidance and minimization measures for potential impacts to wetlands and waters, and no mitigation is proposed.

Proposed Avoidance and Minimization Measures

Caltrans would implement the following measures to address potential impacts to wetlands, waters, and riparian habitat in the Project area:

BIO-12: Wetlands and Waters Construction Work Windows

Work in wetlands, waters, and riparian habitat will be limited to June 15 through October 15 to avoid or minimize impacts to waters of the United States, waters of the state, riparian habitat, and special-status species habitat.

BIO-13: Environmentally Sensitive Areas

Wetlands, waters, riparian habitat, designated critical habitat, and special-status species habitat—including that of Ornduff's meadowfoam—will be delineated as ESAs on contract plans and defined in contract specifications. ESAs outside of the proposed work areas will be specifically identified to avoid during construction. Where work must occur in or adjacent to an ESA, an approved biologist with stop-work authority will be present.

BIO-14: ESA Fencing

Caltrans will install fencing to outline and protect ESAs prior to the start of construction. ESA provisions will be implemented as a first order of work and will remain in place until all construction activities are completed in the work area.

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

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated "islands" of wildlife habitat, forming separated populations. Creek corridors may act as an effective link among suitable habitat in the BSA. The Project would not further develop the existing roadway and would therefore have no impact on terrestrial species movement.

SR 1 acts as a potential barrier to terrestrial wildlife, such as California red-legged frog, in the Project vicinity. However, there is limited ecological incentive for California red-legged frog or San Francisco garter snake to seek habitats west of SR 1, given the proximity to the ocean. Creek corridors throughout the Project footprint may act as an effective link for some populations. Urban land throughout the BSA may serve as a potential barrier to habitat connectivity.

The Project would replace in-kind two small, culverted water crossings that are not likely to support anadromous fish in the BSA: Arroyo de en Medio and an unnamed tributary to Denniston Creek. Work at these crossings would not substantially interfere with movement of any migratory fish or aquatic species. The Project would have no impacts on aquatic species because these culverts would retain existing conditions and are not likely to support anadromous fish species.

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

The Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The Project would have no impact.

f) Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Project is not within the boundaries of any Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or state habitat conservation plans. The Project would have no impact.

2.2.5 Cultural Resources

Question	CEQA Determination
a) Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Less than Significant Impact
b) Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less than Significant Impact
c) Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

Caltrans Professionally Qualified Staff (PQS) archaeologists and architectural historians have reviewed Project information, the Caltrans Cultural Resource Database, as-built plans, aerial photographs, and maps, to evaluate the Project's potential to affect cultural resources. An Area of Potential Effects (APE) was established for the Project area in consultation with Caltrans PQS and Project Manager on October 6, 2021 (Caltrans 2021i). The APE is the area within which an undertaking may directly or indirectly cause impacts in the character or use of historic properties, including vertical impacts. The maximum depth of ground disturbance from Project construction is anticipated to be 6 feet below ground surface. Two archaeological sites were identified in the APE and are considered to be eligible for inclusion in the National Register of Historic Places for the purposes of this Project. They are considered eligible only because they will be protected in their entirety from any potential effects through the establishment of an ESA, in accordance with Stipulation VIII.C.3 of the Section 106 Programmatic Agreement. No built resources were identified in the APE.

Caltrans' Office of Cultural Resource Studies determined that a Finding of No Adverse Effect with Standard Conditions – ESA (Caltrans 2021e) pursuant to Section 106 of the National Historic Preservation Act of 1966 is appropriate for this Project.

2.2.5.1 CEQA Significance Determinations for Cultural Resources

a and b) Would the Project cause a substantial adverse change in the significance of a historical or archaeological resource pursuant to Section 15064.5?

As stated above, a Finding of No Adverse Effect with Standard Conditions - ESA was determined for the Project because the two known archaeological resources in the APE will be protected in their entirety via horizontal and vertical ESAs. In addition, implementation of Project feature PF-CUL-01 (summarized in Table 1-2) would protect previously unknown historical or archaeological resources that may be discovered during construction.

Proposed Avoidance and Minimization Measures

Caltrans proposes the following general avoidance and minimization measures to further protect known resources in the Project area.

CUL-01: ESA Action Plan

An ESA action plan will be developed for the Project to protect the two archaeological resources in the APE in their entirety. Before construction, the ESA Action Plan will be reviewed and approved by the Cultural Studies Office (CSO) at Caltrans' headquarters. The Caltrans archaeologist will ensure that the ESAs are included and described

clearly in the environmental document. The ESAs will be included in the Project's Environmental Commitment Record.

The Caltrans archaeologist will work in coordination with the other responsible parties to ensure that the ESA is represented and depicted in the plans, specification, and estimates package. The package and plans will be reviewed throughout the design process, so that the ESAs are accurately represented and depicted. The Caltrans archaeologist will ensure that the ESA Action Plan is included in the resident engineer's Pending File.

All responsible parties will ensure that the ESAs are discussed during the preconstruction meeting, led by a qualified archaeologist and Native American tribes who may want to administer training as well. The importance of the ESAs will be discussed with construction personnel, stressing that no construction activity (including storage of equipment or materials) may occur in the ESAs, and that workers must remain outside of the ESAs at all times. In addition, historic preservation laws that protect archaeological sites and artifacts against any disturbance or removal will be discussed.

The resident engineer will notify the Caltrans Office of Cultural Resource Studies staff (Caltrans project archaeologist) at least 2 weeks in advance of the start of construction. A field review of ESA locations will be conducted. The Caltrans project archaeologist will mark the ESA locations with the contractor.

CUL-02: Construction Activities for ESA Protection

Temporary high-visibility fencing will be installed by the contractor at least 1 week before beginning any ground disturbance. The Caltrans archaeologist will coordinate this activity with the resident engineer. The Caltrans archaeologist will be present to supervise and monitor this activity.

The Caltrans archaeologist will conduct spot inspections and site visits to ensure the integrity of the ESAs. The Caltrans archaeologist will notify the State Historic Preservation Officer, CSO, and consulting Native American parties within 48 hours of any ESA breach, post-review discovery, or inadvertent effect, to immediately determine how the breach or discovery will be addressed.

CUL-03: Post-Construction Activities

The resident engineer will inform the Caltrans archaeologist when construction is completed. The contractor, in coordination with the resident engineer and the Caltrans archaeologist, will remove the ESA fencing at the completion of construction.

The Project would have no impact on historical or archaeological resources because construction would not occur within known resources, and avoidance and proposed minimization measures would address any potential impacts to any known or unknown resources that may be discovered in the Project area. The impacts would be less than significant.

c) Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?

Known burial sites in the Project vicinity are outside the Project area. The avoidance and minimization measures proposed above (CUL-01, -02, and -3) would protect any human remains discovered in the Project area. In addition, Project feature PF-CUL-02 would establish the protocol for the discovery of previously unknown human remains, including contacting the San Mateo County Coroner, and additional actions if those remains are determined to be Native American. Therefore, no impact would occur.

2.2.6 Energy

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

2.2.6.1 CEQA Significance Determinations for Energy

a) Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Transportation energy usage generally is described in terms of direct and indirect energy, as stated in Chapter 13 of the Caltrans Standard Environmental Reference (Caltrans 2022a). Direct energy usage can be further divided into mobile sources and construction.

Direct energy usage by mobile sources typically is quantified using vehicle miles traveled (VMT), a measure of travel for all vehicles in the Project area, by converting VMT to fuel consumption, measured in British thermal units. The Project would not increase capacity, and therefore is not anticipated to increase VMT or lead to a quantifiable increase in energy usage by mobile sources (see further discussion presented in Section 2.2.17). In addition, Project construction would be a temporary and one-time commitment of energy, similar to any infrastructure improvement project. Energy consumption during construction would be conserved and minimized to the extent feasible through implementation of standard BMPs.

Indirect energy usage is primarily associated with Project maintenance (i.e., fuel used by equipment for periodic maintenance of the system). Many other sources contribute indirectly to the energy consumption of a transportation system, but they can be difficult to quantify reliably at the Project level (Caltrans 2022a). Maintenance and landscaping activities are anticipated to be minimal and would be necessary to maintain the integrity of the system. The impact would be less than significant. No additional mitigation is required.

b) Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The State of California Energy Action Plan and the Integrated Energy Policy Report regulate energy conservation throughout the state. The State of California Energy Action Plan was adopted to ensure adequate, reliable, and reasonably priced electrical power and natural gas quantities for California's residents, through policies that are cost-effective and environmentally conscious (CEC 2003). California policies that are influenced by the California Global Warming Solutions Act, Assembly Bill (AB) 32, are demonstrated in the Integrated Energy Policy Report, which is updated bi-annually to provide policy recommendations to meeting the state's energy demands while addressing carbon constraints (CEC 2021).

According to Senate Bill (SB) 100, the state is targeting 100 percent renewable or carbon-free energy usage by 2045. The California Energy Commission's Clean Transportation Program

leverages public and private investments to support adoption of cleaner transportation, powered by alternative and renewable fuels.

The Energy and Climate Change Element of the San Mateo County General Plan includes goals and implementing policies for reducing energy usage and combatting climate change in the county. Goal 4 of this element is to promote and implement policies and programs to reduce VMT by all vehicles traveling in the unincorporated county. Policy 4.2 focuses on promoting nonmotorized and alternative travel, through strategies such as requiring Project applicants to evaluate and identify appropriate measures to achieve Complete Streets and promote alternative travel; such measures include pedestrian paths/sidewalks or traffic calming improvements. As stated above, the Project would not lead to an increase in VMT, and therefore would not conflict with this element. In addition, as described in Section 1.5, the Project would encourage active transportation by upgrading pedestrian and bicycle features.

The Project would not lead to wasteful, inefficient, or unnecessary consumption of energy resources. Furthermore, it would encourage pedestrian and bicycle access through the inclusion of crosswalks, sidewalks, and curb cuts. Therefore, the Project is not anticipated to conflict with any state or local plans for renewable energy or energy efficiency. No impact would occur.

2.2.7 Geology and Soils

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

2.2.7.1 CEQA Significance Determinations for Geology and Soils

a) Would the Project 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.

Caltrans reviewed the DOC's Earthquake Hazards Zone Application mapping tool and determined that the Project area is not in an earthquake fault zone (DOC 2018a). In accordance with the Division of Mines and Geology Special Publication 42, the Project would not be regulated by the Alquist Priolo Act because the Project area is not in an earthquake fault zone (DOC 2018b). The Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death from the rupture of a known fault. No impact would occur.

ii) Strong seismic ground shaking?

The Project area has the potential to experience moderate to strong ground-shaking during a seismic event, based on historical seismic activity in the Bay Area and because of numerous major (i.e., the San Andreas Fault) and minor (i.e., the Seal Cove and Denniston Creek faults within the San Gregorio Fault Zone) fault lines nearby. The Project would be designed to accommodate ground shaking associated with the nearby faults to the extent feasible, in compliance with all applicable standards and regulations. The Project would have no direct or indirect impact on the potential for ground shaking or on the public's risk for loss, injury, or death from seismic events. No impact would occur.

iii) Seismic-related ground failure, including liquefaction?

Most of the Project area overlaps areas that are susceptible to liquefaction, according to DOC's California Earthquake Hazards Zone Application (DOC 2021). The overlapping area (Half Moon Bay California Geological Survey Liquefaction Zone) has a historical occurrence of liquefaction or local geological, geotechnical, and groundwater conditions that indicate a potential for permanent ground displacements. Permanent ground displacement potential in the Project area is substantial enough that design measures, as defined in PRC Section 2693(c), to reduce seismic risks would be required. These conditions would be addressed in geotechnical studies to be conducted to inform the final Project design. The impact would be less than significant. No additional mitigation is required.

iv) Landslides?

The Project area is outside landslide zones mapped by the DOC. Design and construction guidelines would incorporate engineering standards that address seismic risks, including ground failure related to liquefaction, landslides, and lateral spreading. Therefore, the Project would not increase the risk of loss, injury, or death related to landslides. No impact would occur.

b) Would the Project result in substantial soil erosion or the loss of topsoil?

Project construction would occur on existing paved roads within the Caltrans right-of-way. Some Project elements (e.g., new paved surfaces, and new or replacement traffic infrastructure elements) would include excavation, vegetation clearing, and grubbing. These earth-disturbing activities could cause temporary, localized, and minor erosion of the topsoil. Implementation of standard Caltrans practices and BMPs for erosion control would be done. After completion of construction and earth-disturbing activities, all areas of disturbed soil would be revegetated to stabilize the topsoil, to prevent any post-construction erosion. No substantial soil erosion or loss of topsoil would result from the Project. No impact would occur.

c) Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Earthquake-induced landslides and other seismic-related ground failures were discussed previously, under Impact (a). Caltrans will conduct any necessary or required geotechnical subsurface and design investigations during the final design phase, to ensure that the Project addresses geologic concerns. The Project would not increase the risk of on-site or off-site landslides, lateral spreading, subsidence, liquification, or collapse. No impact would occur.

d) Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soil is soil that expands when wet and shrinks when dry because of mineralogical composition. The Project area is not on expansive soil (as defined in Table 18-1-B of the Uniform Building Code [ICBO 1994]) and would not include construction of habitable structures; therefore, it would not create substantial risk to life or property. No impact would occur.

e) Would the Project 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?

The Project would not include the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

f) Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The Project is not expected to result in disturbance to or overlap with any known paleontological resources, because the Project area is not within fossil-bearing geologic units and the Project would not affect native soil or rock. Caltrans does not anticipate the discovery or destruction of any unique paleontological resources during construction. No impact would occur.

2.2.8 Greenhouse Gas Emissions

Question	CEQA Determination
a) Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant Impact
b) Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant Impact

2.2.8.1 CEQA Significance Determinations for Greenhouse Gas Emissions

a) Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

As stated in Section 2.2.17, the Project would not be capacity increasing and is not expected to lead to a measurable and substantial increase in vehicle travel; the Project would have no impact on VMT. Therefore, the Project would not lead to an increase in operational greenhouse gas (GHG) emissions (i.e., increased emissions from vehicles in the Project area). However, short-term GHG emissions resulting from construction activities are anticipated.

Construction-generated GHG would stem from materials processing by on-site construction equipment, workers commuting to and from the Project site, and potential traffic delays because of construction. These emissions would be produced at different rates throughout the construction phase, depending on the activities involved at various phases of Project construction. Construction-generated GHG was calculated using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, version 9.0.0 (Caltrans 2021b). For a construction duration of 14 months, the total amount of carbon dioxide (CO_2) that would be produced was estimated to be 516.01 tons.

In addition to CO_2, the construction-generated GHG analysis quantified total GHG emissions—including CO_2, methane (CH_4), and nitrous oxide (N_2O)—as carbon dioxide equivalent (CO_2e). CO_2e is a measure of how much energy the emissions of 1 ton of a gas would absorb over a given time, relative to the emissions of 1 ton of CO_2. This figure was obtained by multiplying each GHG by its global warming potential (GWP). The total GHG emissions for construction would be 476.38 metric tons of CO_2e. These emissions would be short-term and would not lead to long-term adverse effects. In addition, Caltrans Standard Specifications would be followed, such as complying with air pollution control rules, regulations, ordinances, and statutes. A description of Project feature PF-GHG-01 and the requirements for contractors under Caltrans Standard Specifications Section 7-1.02A and 7-1.02C is shown in Table 1-2. This would minimize construction-generated GHG emissions to the maximum feasible extent. The impact would be less than significant. No additional mitigation is required.

b) Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Short-term GHG emissions during Project construction are anticipated but would be minimized to the extent feasible, and would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG. At the state level, ARB implements measures to achieve emission reductions of GHG in response to AB 32 and SB 32. AB 32, the

California Global Warming Solutions Act of 2006, initially set a goal of reducing GHG emissions to 1990 levels by 2020. This goal was extended by SB 32 in 2016, to reduce emissions by 40 percent below 1990 levels by 2030. At the local level, plans and programs include the San Mateo County General Plan Energy and Climate Change Element, Energy Efficiency Climate Action Plan, and Government Operations Climate Action Plan. Project construction would not conflict with any goals or policies at the state or local level, because Caltrans' Standard Specifications support the reduction of emissions to the maximum feasible extent. The impact would be less than significant. No additional mitigation is required.

2.2.9 Hazards and Hazardous Materials

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

2.2.9.1 CEQA Significance Determinations for Hazards and Hazardous Materials

a) Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?, and
b) Would the Project 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?

During Project construction, vehicles and equipment would be powered with gasoline or diesel, which are hazardous. Caltrans Standard Specifications and BMPs would be implemented to prevent spills or leaks from construction equipment and from storage of fuels, lubricants, and solvents. All aspects of the Project associated with removal, storage, transportation, and disposal of hazardous material would be done in accordance with the appropriate California Health and Safety Code (H&SC). If hazardous materials are found during construction, the appropriate safeguard measures would be taken, and the Project would comply with Caltrans Standard Specification 1411, Hazardous Waste and Contamination, which outlines handling, storing, and disposing hazardous waste. Project construction is not expected to create a hazard to construction workers, the public, or the environment. Project operation would not involve the use of hazardous materials. No impacts would occur.

c) Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Seven schools are within 0.25 mile of the Project area: Picasso Preschool, Wilkinson School, El Granada Elementary School, Pilarcitos High School and Alternative Education, La Costa Adult School, Hatch Elementary School, and Manuel F. Cunha Intermediate School. A relatively small amount of emissions from vehicles and equipment would occur during Project construction. Adherence to local, federal, and state regulations would reduce the risk of exposure to hazardous materials and accidental hazardous materials released, such as fuel.

No major sources of contamination are evident on the adjacent properties (based on a search of GeoTracker, the State Water Resources Control Board's database and geographic information system) that could migrate onto the site. Therefore, no site investigation for hazardous waste/material would be necessary during the current conceptual phase of the Project. Minor excavations would be involved in unpaved Project areas. If hazardous materials where excavation is proposed are discovered during investigations conducted during final design or construction, Caltrans would follow the appropriate standard specifications for any contaminants. During final design, Caltrans will prepare waste management requirements (e.g., treated wood waste from guardrail removal) to be included in its construction contract. The Project would not result in the spread of hazardous materials or expose sensitive receptors to hazards, such as schools. The impact would be less than significant. No additional mitigation is required.

d) Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Screening of the California Department of Toxic Substances Control's EnviroStor database and its current hazardous waste and substance site list, maintained in accordance with Government Code Section 65962.5, revealed no known hazardous waste sites in the Project area. No impact would occur.

e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?

SR 1 within the Project limits is adjacent to Half Moon Bay Airport. The City and County Association of Governments of San Mateo County (CCAG) completed a final Airport Land Use Compatibility Plan for the Environs of Half Moon Bay Airport in 2014 (CCAG 2014). The Project would be compatible with the policies and criteria considered for SR 1 in the CCAG plan. Because of the relatively short duration of construction and adherence to federal and state regulations during construction, the Project is not expected to result in a safety hazard for people residing or working in the Project area. No impact would occur.

f) Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

SR 1 is a major north-south highway for the communities near the Project area, and SR 1 is expected to be used as an evacuation route in the event of an emergency. The Project would be subject to San Mateo County's Emergency Operations Plan (EOP) (San Mateo County

2015). The EOP provides guidelines for emergency response planning, preparation, training, and execution throughout the county. Project construction would result in temporary and minor increases in construction-related traffic on SR 1. Caltrans would prepare a traffic management plan (TMP) to maintain the flow of traffic during construction and ensure accessibility through the locations along SR 1 for essential services and vehicles. In the event of such an emergency, Caltrans would coordinate with local officials to ensure that SR 1 remains open to emergency traffic.

The impact would be less than significant. No additional mitigation is required.

g) Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The Project area is within zones that are classified as Very High Fire Severity State Responsibility Areas (CAL FIRE 2007). Caltrans proposes to replace and construct new guardrails and safety barriers made of concrete and metal, which would have a limited susceptibility to fires. The Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires (see Section 2.2.20 for additional discussion about wildfire hazards). No impact would occur.

2.2.10 Hydrology and Water Quality

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

2.2.10.1 CEQA Significance Determinations for Hydrology and Water Quality

Responses to these CEQA checklist items are based on the following technical studies, prepared by Caltrans for the Project:

- Environmental Review for Project Approval and Environmental Document Memorandum from Office of Hydraulics Engineering (Caltrans 2021c)
- Multi-Asset Pavement Rehabilitation Project: Water Quality Study (Caltrans 2021d).

In addition, Caltrans reviewed the California Water Board's online database, GeoTracker, to identify any potential major sources of contamination in and adjacent to the Project area.

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

The response to this question is based on Caltrans' Water Quality Study (2021d). The Project area is under the jurisdiction of the San Francisco Bay RWQCB (Region 2), which would be responsible for enforcement of state and federal water quality regulations for the Project. The Project area is within the San Mateo Hydrologic Unit, San Mateo Coastal Hydrologic Area, and the San Gregorio Creek-Frontal Pacific Ocean Watershed. Caltrans has identified seven

receiving water bodies in and near the Project area, including San Vincent Creek, Denniston Creek, Deer Creek, Arroyo Medio, Frenchman's Creek, Pilarcitos Creek, and the Pacific Ocean. Four of the identified receiving waters are sediment-sensitive water bodies: San Vincent Creek, Denniston Creek, Frenchman's Creek, and Pilarcitos Creek.

Three Clean Water Act 303(d)-listed water bodies and pollutants of concern were identified in the Project area or vicinity (i.e., Pacific Ocean at Pillar Point, Pacific Ocean at Pillar Point Beach, and San Vicente Creek). The Project would not contribute to the identified pollutant (indicator bacteria) and would have no effect on pollutant total maximum daily loads in any 303(d) water bodies.

The Project may cause potential temporary impacts on water quality during construction. The Project would have the potential to cause temporary water quality impacts from a change in localized pH, turbidity, and other pollutants entering the active construction site, adjacent areas, and receiving water bodies.

The Project would not cause any new long-term impacts on water quality because the potential for long-term impacts from sediment deposition, sediment transport, and vehicular-related pollutants would be the same for the existing facility (i.e., the No-Build Alternative).

Project construction activities would be subject to the California State Water Resources Control Board's National Pollutant Discharge Elimination System, under Construction General Permit (CGP; Order No. 2009-0009-DWQ) and would require preparation of either a water pollution control plan (WPCP) or a stormwater pollution prevention plan (SWPPP). The current estimate indicates that the Project would cause a disturbed soil area less than 1 acre, and development of a WPCP is expected. Preparation of a WPCP or an SWPPP is a standard Caltrans contract requirement. Either plan would be used to implement standard water quality BMPs, consistent with the proposed construction activities covered in the CGP. The disturbed soil area estimate would be revised during the Project's final design phase, with a final recommendation of either developing a WPCP or an SWPPP. Project conformance with Caltrans' standard specifications for water quality controls, and preparation of a WPCP or an SWPPP, are listed as standard Project features in Table 1-2.

The impact would be less than significant. No additional mitigation is required.

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

The Project would have no effects on groundwater supplies. No impact would occur.

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

(i) result in substantial erosion or siltation on- or off-site;

The Project would not result in substantial erosion or siltation on or off-site. The Project would not cause substantial alteration of the natural flow of waters. No impact would occur.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

The Project is anticipated to result in less than 1 acre of net new impervious surfaces and would not result in flooding on or off-site. No impact would occur.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

The Project would address and improve existing stormwater drainage systems in the Caltrans right-of-way throughout the Project area. The Project would create less than 1 acre of new impervious surface, but in the context of the existing roadway and Project scale, this would not be a substantial additional source of runoff. No impact would occur.

(iv) impede or redirect flood flows?

The Project would not impede or redirect flood flows and is not expected to have any effect on the base floodplains identified in the Project area. No impact would occur.

d) Would the Project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation? No Impact

A single location on SR 1 at Surfer's Beach in the Community of El Granada is susceptible to tsunami and seiche inundation and is in a Federal Emergency Management Agency (FEMA) Flood Zone. Caltrans reviewed the State Water Resources Control Board's GeoTracker data management system for sites with potential to affect water quality in the Project area. No major sources of contamination are evident in the adjacent properties that could migrate into the Project site. The Project would not introduce new pollutants into flood hazard, tsunami, or seiche zones present in the Project area. No impact would occur.

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

The San Francisco RWQCB has prepared and adopted its water quality control plan (Basin Plan), through which it manages surface and groundwater in the region. The Project would coordinate with the San Francisco RWQCB during the permitting process, to maintain compliance with the Basin Plan. No impact would occur.

2.2.11 Land Use and Planning

Question	CEQA Determination
a) Would the Project physically divide an established community?	No Impact
b) Would the Project 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?	Less than Significant Impact

2.2.11.1 CEQA Significance Determinations for Land Use and Planning

a) Would the Project physically divide an established community?

The Project would be constructed within Caltrans right-of-way, and no new roads or existing road expansion are proposed. The Project would not alter the alignment of or access to either highway; therefore, it would not physically divide an established community. In addition, the Project would improve connections across SR 1 for nonmotorized modes of transportation. No impact would occur.

b) Would the Project 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?

SR 1 is the primary access road to coastal cities, unincorporated residential communities, and recreational areas in San Mateo County. SR 92 provides east-west access between the coastal and inland areas of the county. Land uses along the two highways include residential, recreational, and commercial. As stated in Section 2.2.17, the California Coastal Trail generally runs parallel to SR 1 in the Project area and accommodates pedestrians, bicyclists, equestrians, and others. In addition, multiple publicly accessible open space and beach areas are adjacent to the Project area, including Wavecrest Open Space, Venice State Beach, Miramar Beach, Surfers Beach, Mavericks Beach, and Pillar Point Bluff. The Project would be constructed within Caltrans right-of-way, and would not alter existing or future land uses. Access along SR 1 and SR 92 would be managed and maintained during construction, with the exception of temporary lane closures and detours. Temporary impacts on traffic would be minimized by implementation of the Project's TMP, as discussed in Section 2.2.17.

The Project area is subject to the statutory mandates of multiple state, regional, and local plans and programs. A discussion of these plans and programs is presented next, along with an analysis of the Project's consistency with each.

Consistency with State, Regional, and Local Plans and Programs

State Scenic Highway Program

Although the segments of both highways in the Project area are eligible for State Scenic Highway designation, SR 1 and SR 92 in the Project area are not currently designated as part of a state scenic highway. Therefore, the Project would have no effect because those portions of SR 1 and SR 92 have not been designated as part of the State Scenic Highway Program.

Coastal Zone Management Act

The entire Project area is in the California Coastal Zone and is subject to the Coastal Zone Management Act of 1972 (16 United States Code [USC] 1451–1464, as amended), as well as to the California Coastal Act (CCA) of 1976, which was established to further protect the coastal zone. The policies established by the CCA include protection and expansion of public access and recreation, protection of agricultural lands, protection of scenic beauty, biological resources, and protection of property and life from coastal hazards. CCC is responsible for implementation and oversight under the CCA.

The CCA delegates power to local governments (i.e., counties and cities) to enact their own LCPs. The Project area is subject to the policies of two LCPs—those of San Mateo County and Half Moon Bay (San Mateo County 2013b; City of Half Moon Bay 2020). The Project area is under the permitting jurisdiction of the CCC, San Mateo County, and the City of Half Moon Bay, and would be required to undergo review of the pertinent LCPs and the CCC during the detailed design phase. Caltrans would coordinate with the CCC, San Mateo County, and the City of Half Moon Bay to ensure that the Project remains compatible with their plans and programs, with respect to the resource areas identified in this document.

The policies of the CCA give the highest priority to preservation and protection of prime agricultural land and timber lands. The next highest priorities are public recreation and visitor-serving facilities. The Project would not conflict with agricultural land uses or timber land uses in the Project area, as discussed in Section 2.2.2. The Project feature locations do not overlap with land zoned for either use, and no agricultural lands or timber lands are in the Project area. In addition, the Project features would not conflict or overlap with land designated as open space. The Project would not adversely affect the California Coastal Trail or its use in the long term. The Project features would not conflict with uses of the trail.

Key provisions of the CCA, San Mateo County LCP, and City of Half Moon Bay Local Coastal Land Use Plan are provided, along with an evaluation of Project permitting activities (see Table 2-3, Table 2-4, and Table 2-5).

Table 2-3 Key Provisions of the California Coastal Act

Policy Number	Subject of Policy	Coastal Zone Assessment
Section 30210	Maximum public access and recreational opportunities shall be provided.	The Project would not interfere with public access to recreational opportunities, such as adjacent open space and beaches. The Project would improve existing bicycle and pedestrian transportation facilities used by the public throughout the State Route 1 corridor in the Project area. The traffic management plan (discussed in Section 2.2.17) would account for any temporary impediments to access during construction, to maintain access.
Section 30211	Development shall not interfere with public access to the sea.	The Project would not interfere with public access to the sea and would improve existing transportation facilities that are used by the public to travel to coastal access points (see assessment of Section 30210).
Section 30212	New development projects shall provide for public access to the shoreline and along the coast.	The Project would rehabilitate and improve existing transportation facilities and would not expand the existing roadway. The Project would include new bicycle and pedestrian improvements (crosswalks, sidewalks, and curb cuts) that would help connect the public to existing trails and roads accessing the shoreline outside the Project area. Access to the coast already exists near the Project area, and the Project would not affect this access.
Section 30213	Lower-cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.	The Project would not affect access to visitor or recreational facilities. It would improve existing access to public recreational opportunities by enhancing pedestrian and bicycle facilities along the coast.
Section 30252	Public access	See assessments of Sections 30210, 30211, and 30212.
Section 30231	Biological productivity; water quality	The Project design and implementation of appropriate standard California Department of Transportation (Caltrans) Project features would minimize potential impacts on environmentally sensitive areas. Caltrans is proposing avoidance and minimization measures to address specific potential impacts on biological resources, hydrology, and water quality (see Sections 2.2.4 and 2.2.10) that could occur during construction.
Section 30233	Diking, filling, and dredging of wetlands	As stated in Section 2.2.4, the Project would not permanently dike, fill, or dredge wetlands.
Section 30235	Construction altering natural shoreline	The Project would not affect the existing natural shoreline.

Policy Number	Subject of Policy	Coastal Zone Assessment
Section 30240	Environmentally Sensitive Habitat Areas	The Project would have relatively minimal permanent or temporary impacts to local coastal program (LCP)/California Coastal Commission (CCC) jurisdictional riparian areas. Specific impacts would be estimated during the application for a Coastal Development Permit from the LCP or CCC. As outlined in Section 2.2.4, the Project would have less-than-significant impacts on biological resources, including special-status species, riparian habitats and sensitive natural communities, and wetlands. Avoidance and minimization measures BIO-13 and BIO-14 are proposed to delineate environmentally sensitive areas and to protect them during construction. In accordance with Section 30240 (b), work will be sited and designed to prevent impacts that would significantly degrade environmentally sensitive habitat areas. Caltrans will continue to coordinate with the CCC and local coastal planners to ensure that the Project remains consistent with applicable policy.
Section 30241-30242	Agricultural land	There are no Prime Farmland or lands under a Williamson Act contract in the Project area. As stated in Section 2.2.2.1, the Project area is not in but is adjacent to Unique Farmland and Prime Farmland at some locations. However, the Project area would be limited to the existing right-of-way at these locations and would not convert adjacent lands.
Section 30244	Archaeological/ paleontological resources	The Project would have no effects on any archaeological or paleontological resources.
Section 30251	Scenic and visual qualities	Based on the Project features and VIS-01, the Project would be compatible with existing scenic and visual quality.
Section 30254	Public works facilities	The Project does not propose to construct new or expand existing public works facilities, nor does it propose to form any special districts that would induce new development.
Section 30604	Coastal development permits shall include a finding that the development is in conformity with public access and public recreation policies; housing opportunities for low- and moderate-income persons.	Caltrans would be in conformity with public access and public recreation policies. The Project would be a transportation Project and would not affect housing.
Section 30609.5	State lands between the first public road and the sea; sale or transfer	No state lands would be sold to a private entity as part of the Project.

Table 2-4 Key Provisions of the San Mateo County Local Coastal Program

Subject of Policy	San Mateo County Local Coastal Program Assessment
Locating and Planning New Development	The Project would not have any effect on growth, sensitive archaeological or paleontological resources; and would not require development of public services and infrastructure. The California Department of Transportation (Caltrans) would implement best management practices and avoidance and minimization measures to avoid or minimize the Project's potential effects on aesthetics, biological resources, and water quality in the Project area.
Public Works	The Project would upgrade and install highway system components on State Route (SR) 1 and SR 92, which are existing transportation facilities. Highway capacity would not be increased, as specified in Section 2.44b of the San Mateo Local Coastal Program (SMLCP). The alignments and scenic characteristics of SR 1 and SR 92 would be maintained, with implementation of Project features and VIS-01.
Housing	The Project would have no impacts on housing, as discussed in Section 2.2.14.
Energy	The Project would not include construction of any oil or gas wells, onshore oil facilities, pipelines or transmission lines, or alternative energy facilities.
Agriculture	The Project would be constructed within Caltrans' right-of-way and would not affect agricultural land or land zoned for timber harvest. The Project would not conflict with the Agricultural component of the SMLCP.
Aquaculture	The Project would not affect aquaculture facilities or construct any new aquaculture facilities.
Sensitive Habitats	Sensitive habitats exist in the Biological Study Area. However, Project activities would not result in impacts on these habitats, with implementation of Project features and the avoidance and minimization measures for biological resources presented in Appendix C.
Visual Resources	The Project would result in temporary impacts on visual resources during construction. With implementation of Project features and VIS-01, the new Project elements (guardrails) would be compatible with the existing visual quality and character (see Section 2.2.1).
Hazards	The Project is not anticipated to conflict with San Mateo County's Emergency Operations Plan, nor would it exacerbate risks associated with wildfire (see Section 2.2.20). A single location on SR 1 at Surfer's Beach in the Community of El Granada is susceptible to tsunami and seiche inundation and is in a Federal Emergency Management Agency Flood Zone. This Project would not create features that would worsen impacts on the surrounding areas from such hazards.
Shoreline Access	The Project components would not interfere with public access to recreational opportunities, such as adjacent open space and beaches. The traffic management plan (Section 2.2.17) would account for any temporary impediments to access during construction, to maintain access. Caltrans would coordinate with the County of San Mateo on recommendations provided in their Connect the Coastside Plan (San Mateo County 2021), where appropriate for the Project.
Recreation/Visitor Serving Facilities	See the assessment of shoreline access.
Commercial Fishing/ Recreational Boating	The Project would have no impact on commercial fishing or recreational boating.

Table 2-5 Key Provisions of the City of Half Moon Bay Local Coastal Land Use Plan

Subject of Policy	City of Half Moon Bay Local Coastal Land Use Plan Assessment
Social Equity and Environmental Justice	The Project would improve existing road surfaces and traffic operation system elements that would serve all users, and the Project would have no impact on social equity or environmental justice. As stated previously, the Project would not divide an established community.
Development	The Project would not conflict with the development policies of the Local Coastal Land Use Plan (LCLUP). The Project would not induce growth, change existing land use patterns, or conflict with the land use designations identified in Chapter 2 of the plan.
Public Works	The Project would not conflict with the LCLUP's public works, water system, sewer facilities, circulation, stormwater system, and management policies. Project features and standard California Department of Transportation (Caltrans) best management practices would maintain the existing facilities. In addition, key components of the Build Alternative would improve the drainage system in the Project area.
Agriculture	The Project would be constructed within Caltrans' right-of-way and would not affect agricultural land uses or farm worker housing.
Coastal Access and Recreation	The Project components would not interfere with public access to recreational opportunities, such as adjacent open space and beaches. Caltrans would coordinate with the County of San Mateo on recommendations provided in their Connect the Coastside Plan (San Mateo County 2021), where appropriate for the Project. The traffic management plan (Section 2.2.17) would account for any temporary impediments to access during construction, to maintain access.
Natural Resources	As shown in Sections 2.2.4 and 2.2.10, Project impacts on biological resources, hydrology, and water quality would be less than significant.
Environmental Hazards	The Project would not exacerbate environmental hazards associated with climate change, shoreline hazards such as tsunamis, seismic activity, flooding, or wildfire. Sections 2.2.20 and 2.3 discuss the Project's intersection with wildfire and climate change risks, respectively.
Cultural Resources	Caltrans' Professionally Qualified Staff determined that a Finding of No Adverse Effect with Standard Conditions – Environmentally Sensitive Area (ESA) is appropriate for the Project (see Section 2.2.5 and 2.2.18). No impacts on cultural resources or tribal cultural resources would occur with implementation of the ESA, as discussed in Section 2.2.5.
Scenic and Visual Resources	The Project would result in visual changes through roadway rehabilitation, Complete Streets Improvements, and upgrades to traffic operations and safety elements. However, as stated in Section 2.2.1, the Project is anticipated to result in a less-than-significant impact on visual character, with the implementation of Project features, and avoidance and minimization measures.

San Mateo County General Plan

The Project would adhere to the San Mateo County General Plan (San Mateo County 2013a) and align with the following policies, goals, and objectives by providing a safe, reliable transportation system for all users:

- **Goal and Objective (GO) 12.6:** Plan for a transportation system that provides for the safe, efficient, and convenient movement of people and goods in and through San Mateo County.
- **GO 12.7:** Create and maintain Complete Streets that serve all categories of transportation users and goods, providing safe, efficient, comfortable, and convenient travel along all streets through an integrated, balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the General Plan.
- **GO 12.9:** Provide for a balanced and integrated transportation system in the county that allows for travel by various modes and easy transfer between modes.
- **GO 12.11:** Balance and attempt to minimize adverse environmental impacts resulting from transportation system improvements in the county.
- **GO 4.1:** Protect and enhance the visual quality of and from shorelines of bodies of water, including lakes, reservoirs, streams, bays, ocean, and sloughs.

The Project would not cause a substantial adverse effect on coastal resources and is anticipated to have no significant environmental impact due to a conflict with the San Mateo County General Plan.

City of Half Moon Bay General Plan

The City of Half Moon Bay's General Plan is being updated (City of Half Moon Bay 2022). The analysis presented next is based on the adopted elements of the City's General Plan. The Project would be consistent with the following policies and goals of the City's General Plan and its 2013 Circulation Element Update (City of Half Moon Bay 2013):

- **Goal 1:** Develop a functional and cohesive transportation network.
    - *Policy 1-4:* Integrate area-wide drainage plans and water, sewer, and other utility lines into the planning and design of intersection and/or roadway improvements and any new roadways to support new residential or commercial uses in the city.
- **Goal 2:** Maintain safe and convenient vehicle access.
- **Goal 3:** Create and maintain Complete Streets.
    - *Policy 3-1:* Work collaboratively with Caltrans to provide safe and enhanced bicycle and pedestrian facilities crossings and along Highway 1 and SR 92
    - *Policy 3-2:* Promote the development of projects that incorporate all modes of transportation, accommodate all mode users, and facilitate balanced mode share use within the context of the community and the roadway facility purpose.

- *Policy 3-4:* Where appropriate, promote the installation of Intelligent Transportation Systems infrastructure to advance interoperable traffic signal controller systems, traveler information systems, parking management systems, and bicycle/ pedestrian/vehicle detection systems that support all modes of travel on the roadways.

- *Policy 3-6:* Provide programs and funding for maintenance and operations of the roadway network elements, including maintenance of pavement and bridge surfaces, maintaining traffic signal operations, restriping of bicycle and pedestrian pavement markings, and replacing failing bicycle/pedestrian/vehicle detectors.

- **Goal 4:** Foster and support pedestrian and bicycle travel.

The proposed improvements to the highway facilities of SR 1 and SR 92, and to the bicycle and pedestrian facilities (crosswalks, sidewalks, and curb cuts) would align with the goals and policies of the City's General Plan and 2013 Circulation Element Update. Therefore, the Project would be consistent with this plan.

The impact would be less than significant. No additional mitigation is required.

2.2.12 Mineral Resources

Question	CEQA Determination
a) Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
b) Would the Project 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

2.2.12.1 CEQA Significance Determinations for Mineral Resources

a) Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?, and
b) Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The Project would not be constructed in a known mineral resource zone. Project construction would take place in previously disturbed soil within the existing Caltrans right-of-way. According to the United States Geological Survey Mineral Resources On-Line Spatial Data, the Project area is not close to or on a known mineral resource (USGS 2022). No impacts would occur.

2.2.13 Noise

Question	CEQA Determination
a) Would the Project result in 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) Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	Less than Significant Impact

2.2.13.1 CEQA Significance Determinations for Noise

a) Would the Project result in 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?

The Project would be constructed within Caltrans' right-of-way, in both urban and rural areas of San Mateo County. The closest sensitive noise receptors would be residences and commercial businesses in the communities of Moss Beach, El Granada, and Miramar, within 0.5 mile north and south of Project locations. The Project would not be a Type I project under 23 CFR 772, because it would not alter the location of a roadway, alter the horizonal or vertical alignment of a roadway, or increase the number of through-traffic lanes on a roadway. It would not be a Type II project, because it would not be a project for noise abatement on an existing highway. Therefore, the Project would be a Type III project; no significant operational noise effects are anticipated, and no noise study would be required.

The Project could result in increases in noise during construction. However, the construction noise would be temporary and intermittent, and would be within acceptable levels for construction activity. In addition, in accordance with 2018 Caltrans Standard Specifications Section 14-8.02, noise from construction activities would not exceed a maximum noise level of 86 A-weighted decibels at a distance of 50 feet from 9 p.m. to 6 a.m.

The impact would be less than significant. No additional mitigation is required.

b) Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

The Project would cause no long-term increase in groundborne vibration or noise. During construction, the Project would cause minimal, temporary, and intermittent groundborne vibration and groundborne noise at levels that would be less than excessive. The impact would be less than significant. No additional mitigation is required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

Half Moon Bay Airport is adjacent to SR 1 in the Project area, between Capistrano Road and Marine Boulevard (PM 33.1 and PM 34.8). A small portion of SR 1 is in the 60 Community Noise Equivalent Level (CNEL) contour for the airport, and within the 2032 estimated 60 CNEL noise level contour (CCAG 2014). CNEL is the weighted average sound level over a 24-hour period with a penalty of 5 decibels (dB) added between 7 p.m. and 10 p.m. and a penalty of 10 dB added for nighttime hours between 10 p.m. and 7 a.m. These penalties are applied as a weighting factor to address greater noise sensitivity during those typically quieter periods. A CNEL of 65 or greater typically is considered unacceptable for a residential neighborhood. The Project would not affect the CNEL contours determined in the 2014 CCAG report. Project construction workers within the 60 CNEL noise contour for the airport during construction would be working adjacent to live traffic, operating heavy equipment at times, and using all appropriate health and safety personal protective equipment necessary and appropriate for the work being conducted. The Project would not expose people residing or working in the Project area to excessive noise levels. The impact would be less than significant. No additional mitigation is required.

2.2.14 Population and Housing

Question	CEQA Determination
a) Would the Project 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) Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

2.2.14.1 CEQA Significance Determinations for Population and Housing

a) Would the Project 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)?

The Project would not involve construction of new residential buildings or businesses, and it would not extend transportation facilities that could induce population growth. Project activities would be limited to improving the existing transportation facility, increasing accessibility to existing transit stops, and enhancing nonmotorized modes of transportation. No impact would occur.

b) Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Project would not remove or displace people or housing and would not necessitate construction of replacement housing elsewhere. No impact would occur.

2.2.15 Public Services

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

Question	CEQA Determination
a) Fire protection?	No Impact
b) Police protection?	No Impact
c) Schools?	No Impact
d) Parks?	No Impact
e) Other public facilities?	No Impact

2.2.15.1 CEQA Significance Determinations for Public Services

a), b), c), d), and e)

Temporary traffic delays would be possible during Project construction, when lane closures and detours are implemented, which could affect emergency services. However, as discussed in Section 2.2.17, a TMP would be prepared to reduce temporary effects on traffic, and to ensure that access is maintained for emergency service providers and first responders.

The Project would not include elements that would induce population growth, as discussed in Section 2.2.14. No new demand for governmental facilities and services, such as fire protection, police protection, schools, or parks, would occur because of the Project. No impact would occur.

2.2.16 Recreation

Question	CEQA Determination
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than Significant 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

2.2.16.1 CEQA Significance Determinations for Recreation

a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

SR 1 in the Project area supports access to nearby Half Moon Bay State Beach, Wavecrest Open Space, J V Fitzgerald Marine Reserve, and Pillar Point Bluff. Half Moon Bay State Beach is owned and managed by the California Department of Parks and Recreation. Wavecrest Open Space is owned and managed by the Peninsula Open Space Trust. Both the J V Fitzgerald Marine Reserve and Pillar Point Bluff are owned and managed by the San Mateo County Parks Department. In general, the parks are open from 8 a.m. until sunset and allow hiking, bicycling, horseback riding, and walking dogs on leash.

The Project would provide safety improvements and multi-modal transportation enhancements along SR 1. The Project would not include features that would directly or indirectly result in an increase in the use of nearby recreational facilities. The Project would not increase the use of neighborhood parks, regional parks, or other nearby recreational facilities, and therefore it would not be anticipated to cause or accelerate deterioration of those facilities. The impact would be less than significant. No additional mitigation is required.

b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The Project would not include recreational facilities or require construction or expansion of recreational facilities that could have an adverse physical effect on the environment. No impact would occur.

2.2.17 Transportation

Question	CEQA Determination
a) Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than Significant Impact
b) Would the Project conflict or be inconsistent with State CEQA Guidelines Section 15064.3, subdivision (b)?	Less than Significant Impact
c) Would the Project 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) Would the Project result in inadequate emergency access?	Less than Significant Impact

In the Project area, SR 1 is a two-lane undivided highway with two 12-foot lanes and 1- to 4-foot typical outside shoulders. SR 92 in the Project area is a four-lane divided highway of similar shoulder width.

2.2.17.1 CEQA Significance Determinations for Transportation

a) Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The Project would improve and enhance existing transit, roadway, bicycle, and pedestrian facilities in the Project area. The Project is being planned and designed to be constructed and operated to meet current Caltrans' Complete Streets policies, in accordance with Director's Policy 37 (Caltrans 2021g). The Project would be consistent with all applicable plans, including the Caltrans District 4 Bike Plan, Caltrans District 4 Pedestrian Plan, San Mateo County General Plan Transportation Policies, CCAG San Mateo County Comprehensive Bicycle and Pedestrian Plan, City of Half Moon Bay General Plan Circulation Element, and City of Half Moon Bay Bicycle and Pedestrian Master Plan. The Project development process ensures consistency with these plans through partnerships and coordination with local and regional development agencies.

The Project would enhance and improve accessibility at existing San Mateo County Transit District (SamTrans) facilities along SR 1, by paving transit stops at locations where no paved surface currently exists and connecting them via sidewalk to existing sidewalks. These enhancements would improve accessibility for all users and would be consistent with Caltrans' Complete Streets policies. SamTrans operates two bus routes in the Project area: Routes 17 and 18. Route 17 provides weekday and weekend service from Linda Mar to Pescadero, and Route 18 provides school day service from Miramontes Point Road to Main Street in Half Moon Bay. Caltrans would coordinate with SamTrans during construction to minimize the potential for delays to bus service along both routes.

Caltrans is proposing bicycle lane and intersection improvements throughout the Project area, including striping Class II bike lanes, completing connections for Class I bike paths, and improving intersections through curb improvements and crosswalk installations, as described in Sections 1.4.8 and 1.4.9 and shown on Figure 1-7. Caltrans would coordinate with the County of San Mateo on recommendations provided in their Connect the Coastside Plan (San Mateo County 2021), where appropriate for the Project. Caltrans would address temporary

impacts on existing facilities during construction by coordinating with local users through the Project's TMP.

The Project would improve accessibility for active multimodal transportation by providing a safer and more efficient means of traveling the SR 1 corridor in the Project area. The Project would not be anticipated to conflict with any existing or planed active transportation facilities. The impact would be less than significant. No additional mitigation is required.

b) Would the Project conflict or be inconsistent with State CEQA Guidelines Section 15064.3, subdivision (b)?

Section 15064.3, subdivision (b) of the state CEQA guidelines specifies the criteria for analyzing transportation impacts. According to the regulation, transportation projects that reduce or have no impact on VMT should be presumed to cause a less-than-significant transportation impact. The Caltrans' Transportation Analysis under CEQA (TAC) guidance document provides screening criteria for determining whether a project would increase capacity (Caltrans 2020a). Based on the criteria listed under Section 5.1.1 of the TAC, the Project is not likely to lead to a measurable and substantial increase in vehicle travel. The impact would be less than significant. No additional mitigation is required.

c) Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Project would not alter the existing geometric design of SR 1 and SR 92. Project components would be limited to rehabilitating pavement, upgrading highway systems, and implementing Complete Streets elements. Therefore, no hazards are anticipated because of a geometric design feature. No impact would occur.

d) Would the Project result in inadequate emergency access?

The Project would have temporary traffic impacts on roadway access for all users during Project construction, from lane closures and detours that may affect emergency vehicle access.

Proposed Avoidance and Minimization Measure

Caltrans proposes the following measure to avoid and minimize impacts on traffic and emergency vehicles.

TRANS-01: Development of a Transportation Management Plan

Caltrans will develop a Project-specific TMP during the final design phase of the Project. The TMP will be prepared in accordance with Caltrans requirements and guidelines to minimize construction-related delays and impacts on emergency vehicles and the traveling public. The TMP will include the following provisions:

- Coordination with San Mateo County, the City of Half Moon Bay, and any other applicable local jurisdictions for notification of closures and detours
- Coordination with the California Highway Patrol and other local law enforcement

- Use of portable changeable message signs, the California Highway Patrol construction zone enhanced enforcement program, one-way traffic controls, and flaggers
- Continued access for emergency services
- Continued access to any residential driveways

The Project would incorporate the Project features and avoidance and minimization measure into the Project design, and would have less-than-significant impact.

2.2.18 Tribal Cultural Resources

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

Question	CEQA Determination
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	Less than Significant Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less than Significant Impact

This section references the Section 106 Closeout Memorandum and area of potential effects prepared for the Project (Caltrans 2021e; Caltrans 2021i).

2.2.18.1 CEQA Significance Determinations for Tribal Cultural Resources

a), and b) 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 a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Caltrans, pursuant to Section 106 of the National Historic Preservation Act of 1966, determined that a Finding of No Adverse Effect with Standard Conditions – ESA (Caltrans 2021e) is appropriate for the Project, as discussed in Section 2.2.5. Caltrans contacted the Native American Heritage Commission (NAHC) on January 29, 2021, requesting a review of their Sacred Lands File to determine whether any known cultural resource sites are in or near the APE of the Project. The results of the Sacred Lands File were positive, and a list of Native American contacts with potential interest or information regarding the APE was provided. Initial consultation outreach in compliance with Section 106 of the National Historic Preservation Act and AB 52 regarding the Project was sent to all Native American contacts provided by the NAHC on January 28, 2021. One response was received on March 2, 2021, from the Indian Canyon Mutsun Band of Costanoan. The tribe indicated that the Project area is adjacent to an archaeological site identified as culturally sensitive and recommended that a Native American monitor and an archaeological monitor be present on site at all times for any disruptive surveys or earth-moving activities, and to also provide cultural sensitivity training at the beginning of the Project. The tribe was invited to participate in the subsurface archaeological testing conducted by the Caltrans Office of Cultural Resources on August 12, 2021; however, no response was received. Follow-up emails were sent to all other contacts on July 12 and 13, 2021; however, no responses have been received to-date. Consultation is ongoing throughout the life of the Project.

Caltrans proposes avoidance and minimization measures CUL-01, CUL-02, and CUL-03 in Section 2.2.5 and Project features (shown in Table 1-2) that would protect any historical or tribal resources that occur in the Project area. With implementation of Project features and the described avoidance and minimization measure incorporated into the Project design, the impact would be less than significant.

2.2.19 Utilities and Service Systems

Question	CEQA Determination
a) Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	No Impact
b) Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	No Impact
d) Would the Project 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) Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

2.2.19.1 CEQA Significance Determinations for Utilities and Service Systems

a), b), c), d), e)

The Project would not require installation of new utilities but would connect to existing utilities, to power closed-circuit television cameras, fixed-intersection cameras, and traffic monitoring systems. Existing utilities in the Project area may require temporary or permanent relocation. Any interruption of service associated with utility connections or relocations during construction would be temporary and short-term. If necessary, underground utility verification (known as potholing) would be completed during the design phase.

The Project would not include new development or uses that would require water supplies. The Project would generate a small amount of solid waste during construction. However, Caltrans would comply with all federal, state, and local management and reduction statutes and regulations related to solid waste disposal.

No impacts would occur.

2.2.20 Wildfire

If located in or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones, would the Project:

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

2.2.20.1 CEQA Significance Determinations for Wildfire

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

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The Project area is entirely in Local Responsibility Areas, classified as Moderate and Very High Fire Severity Zones (CAL FIRE 2007). The Project would be subject to San Mateo County's EOP, as discussed in Section 2.2.9. The EOP provides guidelines for emergency response planning, preparation, training, and execution throughout the county. The Project would cause short-term construction-related traffic on SR 1. Caltrans would prepare a TMP to maintain the flow of traffic during construction, and to ensure priority access for emergency vehicles through the Project area. Therefore, a substantial reduction in emergency response times is not expected; after construction, no changes would occur to the existing capacity of the roadway that would affect an emergency response plan or evacuation plan. The impact would be less than significant. No additional mitigation is required.

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?, and

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?

The Project would not affect occupied structures. The Project would not require installation of associated infrastructure that would exacerbate fire risk in the Project area. During

construction, measures for minimizing fire risks would be incorporated and would follow state and federal fire regulations. No impacts would occur.

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?

Frequent landslides and erosion are known to occur along SR 1. Implementation of erosion control measures would be incorporated into the design of the Project, in compliance with all applicable regulations or as required by environmental permits issued to the Project by state and federal regulatory agencies. The Project's construction and operations would not alter the existing topography or create slopes that would increase susceptibility to wildfire hazards, including downslope or downstream flooding, or landslides. No impact would occur.

2.2.21 Mandatory Findings of Significance

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

2.2.21.1 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?

The Project does not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal species; nor does it have the potential to affect important examples of California history or prehistory. The Project would have less-than-significant impacts on biological or cultural resources because implementation of Project features and avoidance and proposed minimization measures would address any potential impacts in the Project area. Caltrans is proposing avoidance and minimization measure BIO-11 specifically to avoid impacts to the rare plant population of Ornduff's meadowfoam that is known to occur in the Project area. The impact would be less than significant.

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)?

The Project would be constructed in the vicinity of other past and planned Caltrans projects, as shown in Table 2-6. No capacity-increasing projects are in the Project vicinity. In addition, San Mateo County and the City of Half Moon Bay have programmed projects, and plans that recommend projects, in and adjacent to the Project area. These are described in Table 2-7.

Table 2-6 Past and Planned Caltrans Projects in the Region

Project Number and Title	Project Location	Project Description	Construction Year
EA 04 2K880 State Route (SR) 1 Traffic Operational Systems Improvement Project	SR 1 post mile (PM) 26.43/ 47.20	Provide emergency and incident-management-related information to the traveling public and Caltrans	2022
EA 04 0Q610 San Mateo SR 1 Safety Barrier Project	SR 1 PM 36.49/ 38.31	Traffic safety project to reduce run-off-the-road incidents	Anticipated to be 2024 to 2025
EA 04 2J790 SR 1 and SR 84 Structures and Scour Mitigation Project	SR 1 PM 28.9 and SR 84 PM 7.55	Retrofit scour critical bridges at the Pilarcitos Creek Bridge No. 35 0139L/R and on SR 84 at San Gregorio Creek Bridge No. 35 0166	Anticipated to be 2022 to 2023
EA 04 0Q670 Storm Drain System Repair	SR 1 PM 36.2	Repair damaged storm drain and restore eroded embankment near Montara, south of 9th Street	2023
EA 04 0Q440 Best Management Practices	SR 1 PM 44.0/ 48.0	Construct permanent best management practices to achieve statewide National Pollutant Discharge Elimination System permit compliance units for trash capture and Total Maximum Daily Load	2023
EA 1Q130 – Gray Whale Cove Pedestrian Crossing	SR 1 PM 37.8/ 38.0	Modifications to the Gray Whale Cove State Beach parking lot off SR 1 and the pedestrian crossing from the parking lot across the roadway to the beach, to improve pedestrian safety for beach users	N/A

Table 2-7 Local Plans and Projects in the Region

Plan or Project Title	Location	Plan or Project Description	Construction Year
Highway 1 Safety and Mobility Improvement Study (San Mateo County)	A 7-mile stretch of SR 1 in San Mateo, which includes the Project area (San Mateo County 2012)	The potential improvements of this endeavor include designated pedestrian crossings, left-turn lanes, acceleration lanes, and raised medians. San Mateo County's Connect the Coastside Plan, Plan Princeton, and Unincorporated San Mateo County Active Transportation Plan also include recommended projects.	N/A
Connect the Coastside (San Mateo County)	SR 1 and SR 92 in San Mateo County	Connect the Coastside makes recommendations to improve transportation safety and mobility for residents of the San Mateo Coast. These recommendations include pedestrian and bicycle facilities, such as the Highway 1 Multimodal Parallel Trail.	N/A

Plan or Project Title	Location	Plan or Project Description	Construction Year
Plan Princeton (San Mateo County)	The community of Princeton, San Mateo County	This is a draft update to the land use plan for the community of Princeton. It would be used as a basis for evaluating future development projects, with the goal of supporting and enhancing the lives of Princeton residents and visitors.	N/A
Unincorporated San Mateo County Active Transportation Plan (San Mateo County)	San Mateo County, to include unincorporated portions of the Project area	This plan establishes a framework for new active transportation projects in unincorporated San Mateo County. It includes pedestrian and bicycle recommendations to address gaps and enhance existing facilities.	N/A
Eastside Parallel Trail Expansion (City of Half Moon Bay)	City of Half Moon Bay, from Roosevelt Boulevard to Mirada Road	This project will extend an existing Class I path to connect with the proposed San Mateo County trail.	Unknown
Highway 1 Safety and Operational Improvements (City of Half Moon Bay)	City of Half Moon Bay, along SR 1	This project will implement operational and safety improvements to SR 1, to include new pedestrian facilities, a signalized intersection, and improvements to bus stop pullout areas.	2023
City of Half Moon Bay Bicycle and Pedestrian Master Plan (City of Half Moon Bay)	City of Half Moon Bay	This plan describes the existing bicycle and pedestrian network in the City of Half Moon Bay, and provides recommendations for future improvements.	N/A

The cumulative impact would be less than significant, and no additional mitigation is required.

c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The Project is not anticipated to cause any additional substantial direct or indirect adverse impacts on human beings from the existing transportation facilities, and proposes features that would serve to protect and enhance the safety of users. No impact would occur.

2.3 Climate Change

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

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

The impacts of climate change are already being observed in the form of sea-level rise, drought, extended and severe fire seasons, and historic flooding from changing storm patterns. The most important strategy to address climate change is to reduce GHG emissions. Additional strategies are necessary to mitigate and adapt to these impacts. In the context of climate change, "mitigation" involves actions to reduce GHG emissions to lessen adverse impacts that are likely to occur. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation Project.

2.3.1 Regulatory Setting

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

2.3.1.1 Federal

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

NEPA (42 USC Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

FHWA recognizes the threats that extreme weather, sea level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values— "the triple bottom line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and

global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

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

U.S. EPA published a final rulemaking on December 30, 2021, that raised federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026, increasing in stringency each year. This rulemaking revised lower emissions standards that were established in June 2020 for model years 2021 through 2026 in the Safer Affordable Fuel-Efficient Vehicles Rule Part Two. The updated standards will result in avoiding more than 3 billion tons of GHG emissions through 2050 (U.S. EPA 2021a).

2.3.1.2 State

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

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

- **AB 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006:** AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that ARB create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (H&SC Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

- **EO S-01-07 (January 18, 2007):** This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB readopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

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

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

- **EO B-16-12 (March 2012):** This order requires state entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

- **EO B-30-15 (April 2015):** This order establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure that California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$). (GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent," or CO_2e. The GWP of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.) Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, Safeguarding California, every 3 years, and to ensure that its provisions are fully implemented.

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

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

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

- **SB 150, Chapter 150, 2017, Regional Transportation Plans (RTPs):** This bill requires ARB to prepare a report that assesses progress made by each metropolitan

planning organization in meeting their established regional GHG emission reduction targets.

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

- **EO N-19-19 (September 2019):** This order advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

2.3.1.3 Environmental Setting

The segment of SR 1 in the Project area is in Half Moon Bay and unincorporated areas in San Mateo County. This segment of SR 1 is in a semi-rural environment and is adjacent to both undeveloped and developed areas. SR 1 provides access to beaches, state parks, and national recreation areas. The majority of GHG emissions in the Project area are from vehicle use.

The BAAQMD's 2017 clean air plan addresses GHG emissions in the Project region. U.S. EPA is responsible for documenting GHG emissions nationwide; the ARB does so for the state, as required by H&SC Section 39607.4.

2.3.1.4 Greenhouse Gas Inventories

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. Cities and other local jurisdictions may also conduct local GHG inventories to inform their GHG reduction or climate action plans.

National GHG Inventory

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. The 1990 2019 inventory found that overall GHG emissions were 6,558 million metric tons in 2019, down 1.7 percent from 2018 but up 1.8 percent from 1990 levels. Of these, 80 percent were CO_2, 10 percent were CH_4, and 7 percent were N_2O; the balance consisted of fluorinated gases. CO_2 emissions in 2019 were 2.2 percent less than in 2018, but 2.8 percent more than in 1990. As shown on Figure 2-1, the transportation sector accounted for 29 percent of GHG emissions in the United States in 2019 (U.S. EPA 2021b, 2021d).

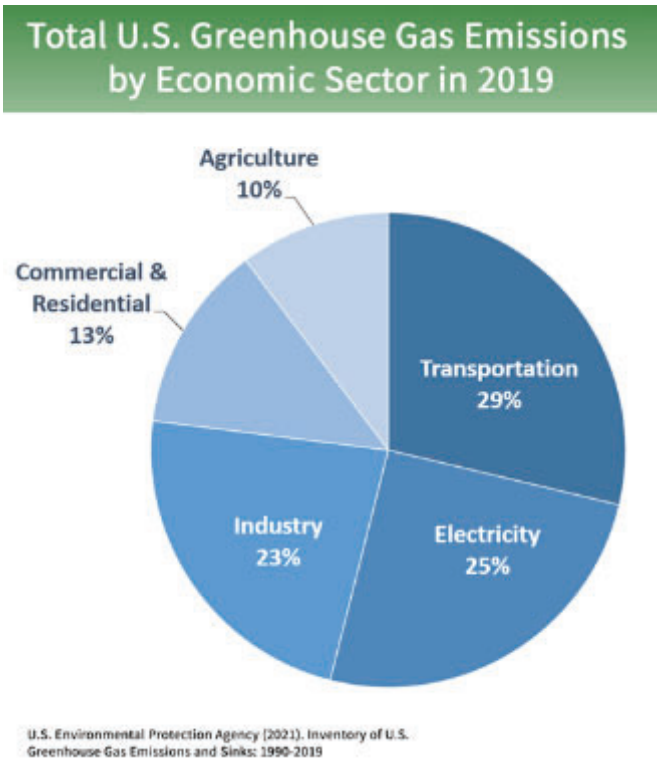

Figure 2-1 U.S. 2019 Greenhouse Gas Emissions

Source: U.S. EPA 2021c

State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2021 edition of the GHG emissions inventory reported emissions trends from 2000 to 2019. It found that total California emissions were 418.2 $MMTCO_2e$ in 2019, a reduction of 7.2 $MMTCO_2e$ since 2018 and almost 13 $MMTCO_2e$ below the statewide 2020 limit of 431 $MMTCO_2e$. The transportation sector (including intrastate aviation and off road sources) was responsible for about 40 percent of direct GHG emissions, a 3.5 $MMTCO_2e$ decrease from 2018 (Figure 2-2). Overall statewide GHG emissions declined from 2000 to 2019 despite growth in population and state economic output (Figure 2-3) (ARB 2021).

AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008. The second updated plan, California's 2017 Climate Change Scoping Plan, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

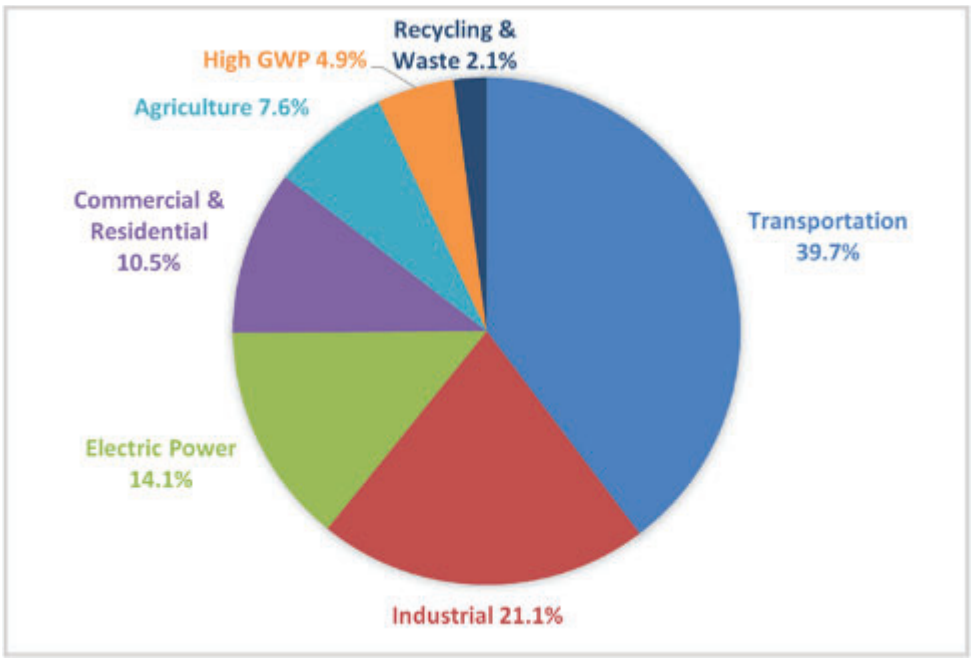

Figure 2-2 California 2018 Greenhouse Gas Emissions by Economic Sector

Source: ARB 2021

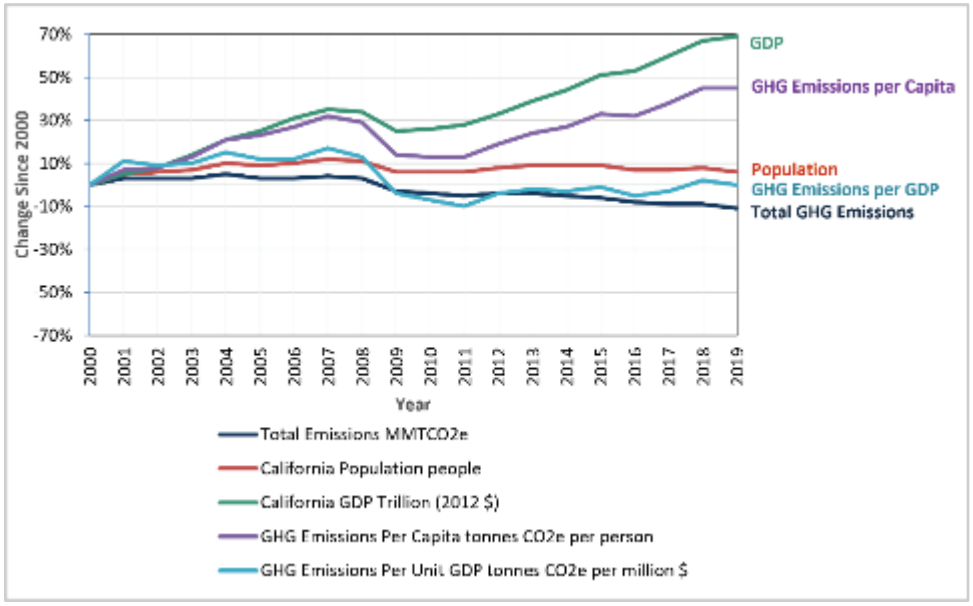

Figure 2-3 Change in California GDP, Population, and GHG Emissions Since 2000

Source: ARB 2021

2.3.1.5 Regional Plans

ARB sets regional targets for California's 18 MPOs to use in their RTP/SCS to plan future projects that would cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The Metropolitan Transportation Commission (MTC) is the MPO and regional transportation planning agency for the Project region, with GHG reduction targets of 10 percent by 2020 and 19 percent by 2035. The Project would be included in the MTC RTP, Plan Bay Area 2050.

The 2017 clean air plan, *Spare the Air, Cool the Climate* (BAAQMD 2017), defines strategies for climate protection in the Bay Area that support goals laid out in Plan Bay Area 2050 (ABAG and MTC 2021). Those goals include transforming the transportation sector to reduce motor vehicle travel; promote zero-emissions vehicles and renewable fuels; adopt fixed- and flexible-route transit services; and support infrastructure and planning that enable a large share of trips by bicycling, walking, and transit. Local climate action plans also offer GHG reduction strategies.

San Mateo County adopted an energy efficiency climate action plan in 2013, with a GHG emissions reduction target of 17 percent below 2005 emissions levels by 2020. The climate action plan aligns with GHG emissions reduction goals and policies of the San Mateo County General Plan that focus on energy efficiency, waste reduction, and efficient land use in the unincorporated county (San Mateo County 2013a).

2.3.1.6 Project Analysis

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

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

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

Operational Emissions

As stated in Section 2.2.17, the Project would not be capacity increasing and is not expected to lead to a measurable and substantial increase in vehicle travel. This type of project generally causes minimal or no increase in operational GHG emissions. Because the Project would not increase the number of travel lanes on SR 1, no increase in VMT would occur.

Although some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

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

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

GHG emissions are responsible for causing climate change. As discussed in Section 2.2.8, GHG emissions would be generated during Project construction. Caltrans estimates that, over a construction period of 14 months, the total amount of CO_2 produced would be 516.01 tons. The Project's total CO_2e emissions[1] (CO_2, CH_4, and N_2O) would be 476.38 metric tons.

Because GHG emissions associated with construction of this Project are not substantial, this Project is not expected to contribute a significant cumulative impact. Some GHG emissions may be associated with ongoing maintenance operations from the use of vehicles and gas or diesel equipment. Nonetheless, maintenance operations would occur periodically and are not expected to contribute significantly to GHG emissions.

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

CEQA Conclusion

As stated in Section 2.2.8.1 above, the Project would not lead to an increase in operational GHG emissions (i.e., increased emissions from vehicles in the Project area); and short-term GHG emissions resulting from construction activities would not lead to long-term adverse effects. Therefore, the impact would be less than significant. Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

[1] Gases are converted to CO_2e by multiplying by their GWP. Specifically, GWP is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period, relative to the emissions of 1 ton of CO_2.

2.3.2 Greenhouse Gas Emissions Reduction Strategies

2.3.2.1 Statewide Efforts

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

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

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

In addition, SB 1386 established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove CO_2 from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued EO N-82-20 to combat the crises in climate change and biodiversity. This order instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency released Natural and Working Lands Climate Smart Strategy Draft for public comment in October 2021.

2.3.2.2 Caltrans Activities

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

Climate Action Plan for Transportation Investments

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

California Transportation Plan

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

Caltrans Strategic *Plan*

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

Caltrans Policy Directives and Other Initiatives

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

2.3.2.3 Project-Level GHG Reduction Strategies

Implementation of Caltrans Standard Specifications—such as complying with air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the Project contract—and the use of construction BMPs would result in reducing GHG emissions from Project construction activities.

In addition, with innovations such as longer pavement lives, improvement in traffic management, and changes in materials, construction-related GHG emissions that are produced during construction can be offset to some degree by longer intervals between

maintenance and rehabilitation activities. The following measures would be implemented for the Project, to reduce GHG emissions and potential climate change impacts from the Project:

- regular vehicle and equipment maintenance;
- limiting idling of vehicles and equipment on site;
- if practicable, recycling nonhazardous waste and excess material, and if recycling is not practicable, disposing the material; and
- using solar-powered signal boards, if feasible.

Caltrans Standard Specifications Sections 7-1.02A and 7-1.02C, Emissions Reduction, require contractors to comply with all laws applicable to the Project, and to certify that they are aware of and would comply with all ARB emissions reduction regulations (see PF-AQ-03 in Table 1-2).

A TMP will be prepared during the design phase to minimize traffic disruptions from Project construction. Minimizing traffic delays during construction will help reduce GHG emissions from idling vehicles (see avoidance and minimization measure TRANS-01).

BMPs for air quality will be incorporated during construction activities (e.g., limiting the idling of vehicles and equipment on site, and maintaining vehicles and equipment).

2.3.3 Adaptation

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

2.3.3.1 Federal Efforts

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

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

The United States Department of Transportation (U.S. DOT) Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate

consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of U.S. DOT to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (U.S. DOT 2011).

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

2.3.3.2 State Efforts

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

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

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

In 2008, then-governor Arnold Schwarzenegger recognized the need when he issued EO S-13-08, focused on sea-level rise. Technical reports on the latest sea-level rise science were first published in 2010 and updated in 2013 and 2017. The 2017 projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the State of California Sea-Level Rise Guidance Update in 2018. This EO also gave rise to the California Climate Adaptation Strategy (2009), updated in 2014 as Safeguarding California: Reducing Climate Risk (Safeguarding California Plan), which addressed the full range of climate change impacts and recommended adaptation strategies. The Safeguarding California Plan was updated in 2018 and again in 2021 as the California Climate Adaptation Strategy, incorporating key elements of the latest sector-specific plans such as the Natural and Working Lands Climate Smart Strategy, Wildfire and Forest Resilience Action Plan, Water Resilience Portfolio, and the CAPTI (described above). Priorities in the 2021 California Climate

Adaptation Strategy include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, nature-based climate solutions, use of best available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2021).

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

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

2.3.4 Caltrans Adaptation Efforts: Vulnerability Assessments

Caltrans completed climate change vulnerability assessments to identify segments of the state highway system that are vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea-level rise.

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

2.3.5 Project Adaptation Analysis

The January 2018 *Caltrans Climate Change Vulnerability Assessments* for the District 4 region (Caltrans 2018), which covers the nine-county San Francisco Bay Area, was consulted regarding climate stressors in the Project area. The report and accompanying Climate Change Vulnerability Assessment map tool (Caltrans 2017) identified the following climate change conditions for the Project area for the analysis years 2025, 2055, and 2085.

2.3.5.1 Sea-Level Rise Analysis

The California Ocean Protection Council (OPC) provides the most current accepted estimates for sea-level rise in California. Projected sea-level rise based on the OPC State of California Sea Level Rise Guidance 2018 Update (OPC 2018) at the nearest tide gauge (San Francisco)—assuming a high emissions scenario to the end of the century (i.e., 2100), with a 1-in-200 (0.5 percent) probability—indicates that sea-level rise will rise to meet or exceed 6.9 feet above current conditions. To analyze how this level of rise would impact the Project area, the NOAA Sea-Level Rise viewer (https://coast.noaa.gov/digitalcoast/tools/slr.html) and Point Blue's Our Coast Our Future viewer (https://ourcoastourfuture.org/hazard-map/) were used to review SR 1 in the Project area. Both tools were examined using the nearest sea-level

rise scenario to the OPC projection (identified above) that was available in each viewer (7 feet of modeled sea-level rise above the current mean higher high water tidal elevation using the NOAA viewer, and 6.6 feet [with a 100-year storm event] using the Point Blue viewer). Caltrans reviewed the entire SR 1 corridor using both tools and determined that the Project area is not subject to sea-level rise inundation at current tidal elevations and is not in an area that would be subject to inundation under the estimated potential sea-level increase by the end of the century under a scenario of reasonably likely sea-level rise and storm surge.

Caltrans notes that Surfer's Beach adjacent to SR 1 in the community of El Granada is vulnerable to erosion and wave run up at locations under the sea-level rise scenarios examined for this analysis. However, the projected sea-level rise scenario to the end of the century would extend beyond the service life of the proposed pavement work at this location. In the projected scenarios reviewed for this analysis, there is potential for inundation of the beach and pedestrian path on the western side of SR 1 by end of century. Low levels of inundation are projected to skirt the SR 1 shoulder at Coronado Street by the year 2100. Flood risk management at Surfer's Beach to address inundation of these adjacent features over the long term would require substantial shoreline protection efforts that are outside the purpose and need, and the service life, of the work proposed for the Project. Caltrans welcomes coordination and expects to participate in discussions with stakeholder groups to identify long-term solutions to address sea-level rise at Surfer's Beach that may also affect the existing transportation facilities.

Based on Caltrans review, no direct impacts on transportation facilities from sea-level rise are anticipated from the Project.

2.3.5.2 Floodplains

Three FEMA Flood Insurance Report Maps, all dated August 2, 2017, overlap the Project area. These include map numbers 06081C0119F, 06081C0138F, and 06081C0252F. The Project is not expected to have any impact on the base floodplains that are identified in the maps.

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Chapter 3 Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. This helps planners to determine the necessary scope of environmental documentation and the level of analysis required; and to identify potential impacts, avoidance and minimization measures, and related environmental requirements. Consultation and public participation for this Project will be accomplished through a variety of formal and informal methods. This chapter summarizes the results of Caltrans' preliminary efforts to fully identify, address, and resolve Project-related issues through early and continuing coordination.

3.1 Consultation and Coordination with Public Agencies

3.1.1 United States Fish and Wildlife Service Consultation Summary

Caltrans is the lead federal agency for Section 7 consultation. Consultation with USFWS has not begun yet. Official species lists were acquired on April 21, 2022 (Appendix D).

Designated critical habitat is presented in the BSA for California red-legged frog, and the Project may have indirect adverse effects on California red-legged frog and San Francisco garter snake. Caltrans made the following preliminary determinations for USFWS jurisdictional resources:

- the Project *may affect, but is not likely to adversely affect,* California red-legged frog;
- the Project *may affect, but is not likely to adversely affect*, federally designated critical habitat for California red-legged frog; and
- the Project *may affect, but is not likely to adversely affect*, San Francisco garter snake.

A Biological Assessment was submitted to USFWS on July 21, 2022, pursuant to Section 7 of FESA, for potential Project effects on California red-legged frog and San Francisco garter snake. The Project has potential for take of these species in the form of harassment or harm with Project implementation. The term "take" under FESA means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Because the San Francisco garter snake is also a fully protected species under California Fish and Game Code, take of that species will be limited to harassment, and all other forms of take will be avoided through implementation of Project-specific measures, as described in Section 2.2.4. No effects on any other listed, candidate, or proposed wildlife species are anticipated. Caltrans biologists have worked closely with Project engineers to limit the size and scope of the Project. The Project is proposing specific avoidance and minimization measures that would be implemented to reduce impacts on listed, candidate, and proposed wildlife species and their habitats (Appendix C). By implementing these measures, Caltrans anticipates minimal adverse direct impacts on California red-legged frog and its habitat, and San Francisco garter snake. USFWS is expected to issue its Biological Opinion during the project's final design and permitting phase.

3.1.2 National Marine Fisheries Service Consultation Summary

Caltrans obtained official National Marine Fisheries Service (NMFS) species lists on April 21, 2022 (Appendix D) The Project overlaps with several waterways that may or are known to support federally listed California Central Coast DPS steelhead (*Oncorhynchus mykiss irideus*) and its critical habitat. No other federally listed fish species have potential to occur in the Project area. Caltrans has identified in the BSA two waterways that are known to support steelhead (Pilarcitos Creek and Arroyo Leon), three waterways that may support steelhead (Frenchman's Creek, Denniston Creek, and Deer Creek), and two waterways that are not likely to support steelhead (Arroyo de en medio and an unnamed tributary to Denniston Creek). The actions proposed by the Project are not anticipated to impact individuals or habitat for NMFS regulated species. Caltrans has determined that the Project would have no effect on steelhead or its critical habitat, and Section 7 consultation with NMFS is not required.

Caltrans had determined that NMFS-regulated EFH is present in the Pilarcitos Creek BSA for Coho salmon. However, the Project would have no effect on Coho salmon. Work in the vicinity of this waterway would be limited to guardrail replacement in the current footprint of road shoulder areas, and there would be no impacts to aquatic or riparian habitat at those locations. Implementation of the Project features would prevent siltation or water quality degradation from impacting EFH. No effects to EFH are anticipated, and consultation with NMFS will not be needed.

3.1.3 California Department of Fish and Wildlife Consultation Summary

State-listed species that have the potential to occur in the BSA include San Francisco garter snake. Coordination with CDFW will occur during the Project planning phase, as part of a CFGC Section 1602 Lake and Streambed Alteration Agreement. No state-level take of CESA species is anticipated.

3.1.4 Coastal Zone Coordination

As stated in Section 2.2.11, the Project is under the jurisdiction of the CCC, San Mateo County LCP (San Mateo County 2013b), and City of Half Moon Bay local coastal land use plan (City of Half Moon Bay 2020).

Caltrans' coordination in the Coastal Zone has included discussing potential locations for Project components with various public agencies. Caltrans had a discussion with the City of Half Moon Bay regarding potential variable message sign locations that were previously requested by the City along SR 92. This discussion was held when variable message signs were still being considered by the Project. Variable message signs on SR 1 and SR 92 have been removed from the Project's Build Alternative design.

On September 23, 2021, Caltrans hosted a joint preliminary stakeholder outreach meeting to provide a summary of the Project, as well as the nearby San Mateo SR 1 Safety Barrier Project (EA 0Q610/Project ID 0418000123). Attendees included representatives from the following agencies:

- CCC
- San Mateo County
- City of Half Moon Bay
- Midcoast Community Council

- Half Moon Bay Coastside Chamber of Commerce

Caltrans presented an overview of both projects and solicited feedback and questions from the meeting attendees. Attendees voiced both support and concerns, and asked questions regarding the Project components. Caltrans will continue to coordinate with all stakeholders as the Project moves forward.

On March 28, 2022, Caltrans hosted a follow-up stakeholder outreach meeting to provide updates on the Project ahead of the public circulation of the draft environmental document. Attendees included representatives from the following offices and agencies:

- The Office of Assemblymember Kevin Mullin
- San Mateo County Sheriff's Department
- California Department of Forestry and Fire Protection (CAL FIRE)
- CCC
- San Mateo County
- City of Half Moon Bay
- Midcoast Community Council
- Half Moon Bay Coastside Chamber of Commerce

Caltrans gave a slide presentation that included an overview of the 0Q130 Project scope, visual simulations, schedule, and budget to coastal stakeholder groups for follow-up outreach and Project coordination. The second half of the meeting was open discussion. Attendees asked questions about Project components, and voiced concerns regarding the proposed variable message signs. Caltrans determined that it would carry this Project forward without including the variable message signs, but will continue to consider them on future efforts along the SR 1 corridor. Caltrans will continue to coordinate with all stakeholders as the Project moves forward.

On April 13 and 14, 2022, Caltrans held three separate meetings with stakeholder groups, including the CCC, CAL FIRE, the California State Assembly, California Highway Patrol, San Mateo County Planning Department, the City of Half Moon Bay, the Half Moon Bay Coastside Chamber of Commerce, and the Midcoast Community Council. These meetings were held to receive feedback on the Project.

3.2 Circulation, Review, and Comment on the Initial Study

Public input on the Project was solicited during the review period for the IS, which lasted from July 8, 2022, to August 8, 2022. Additionally, comments were accepted after the close of this review period. A number of methods were used to notify the public of the availability of the Draft IS/ND, including sending out mailers to local residents near the proposed Project area; posting the draft initial study document on its District 4 website; posting the document on CEQA-Net; transmitting notification letters to state and local elected officials, non-elected state and federal officials, and direct stakeholder groups in advance of circulation; and by sending notification to agencies with interest through its CEQA posting on the State Clearinghouse. During the review period, Caltrans held a virtual public hearing on July 21, 2022, to share information about the Project and obtain feedback on the Draft IS/ND from interested parties. All formal comments are addressed, and responses published in this Final IS/ND in Appendix F.

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Chapter 6 References

Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC). 2021. Final Plan Bay Area 2050. October. Available online at: https://www.planbayarea.org/finalplan2050.

Bay Area Air Quality Management District (BAAQMD). 2017. *Spare the Air, Cool the Climate. Clean Air Plan 2017*. Adopted April 19, 2017. Available online at: https://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans. Accessed June 28, 2021.

Becker, G.S., and I.J. Reining. 2008. Steelhead/rainbow trout (*Oncorhynchus mykiss*) resources south of the Golden Gate, California. Cartography by D.A. Asbury. Center for Ecosystem Management and Restoration. Oakland, California.

Buxton, Eva G. 2013. A new species of Limnanthes (*Limnanthaceae*) from San Mateo County, California. Madroño, Vol. 60, No. 3, pp. 229-235.

California Air Resources Board (ARB). 2021. California Greenhouse Gas Emissions Inventory–2021 Edition. Available online at: https://ww2.arb.ca.gov/cc/inventory/data/data.htm. Accessed October 13, 2021.

———. 2022. Climate Change. Available online at: https://ww2.arb.ca.gov/our-work/topics/climate-change. Accessed January 12, 2022.

California Department of Conservation (DOC). 1997. *California Agricultural Land Evaluation and Site Assessment Model*.

———. 2018a. DOC Maps: Agriculture. Available online at: https://maps.conservation.ca.gov/agriculture/. Accessed January 31, 2022.

———. 2018b. *Earthquake Fault Zones (A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California)*. California Geological Survey (CGS) Special Publication 42. Available online at: https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Publications/SP_042.pdf.

———. 2021. *Seismic Hazard Zone Report for the Half Moon Bay 7.5-Minute Quadrangle, San Mateo County, California*. California Geological Survey (CGS). Available online at: https://www.conservation.ca.gov/cgs/Documents/Publications/SHZR/SHZR_132_Half_Moon_Bay_a11y.pdf.

———. 2022. DOC Maps: Agriculture. Available online at: https://maps.conservation.ca.gov/agriculture/.

California Department of Forestry and Fire Protection (CAL FIRE). 2007. Fire Hazard Severity Zone Maps. Available online at: https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/.

California Department of Transportation (Caltrans). 2016. *Pavement Condition Report*.

———. 2017. Caltrans Climate Change Vulnerability Assessment Map. Available online at: https://www.arcgis.com/apps/webappviewer/index.html?id=517eecf1b5a542e5b0e25f337f87f5bb.

———. 2018. *Caltrans Climate Change vulnerability Assessments. District 4 Technical Report*. Available online at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/2019-climate-change-vulnerability-assessments/ada-remediated/d4-technical-report-a11y.pdf. Accessed April 25. 2022.

———. 2020a. *Transportation Analysis under CEQA (TAC).* First edition. Available online at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-tac-fnl-a11y.pdf. Accessed January 14, 2022. September.

———. 2020b. *Caltrans Greenhouse Gas Emissions and Mitigation Report.* Final. Prepared by ICF, Sacramento, CA. Available online at: https://dot.ca.gov/programs/public-affairs/mile-marker/summer-2021/ghg. Accessed December 13, 2021. August.

———. 2021a. *California Transportation Plan 2050.* February. Available online at: https://dot.ca.gov/programs/transportation-planning/state-planning/california-transportation-plan. Accessed March 3, 2021.

———. 2021b. *Construction-Related Greenhouse Gas (GHG) Emissions Analysis Memorandum*. July 14.

———. 2021c. *Environmental Review for PAED Memorandum from Office of Hydraulics Engineering*. July 14.

———. 2021d. *Multi-Asset Pavement Rehabilitation Project: Water Quality Study*. October.

———. 2021e. *Office of Cultural Resource Studies (OCRS) Section 106 Closeout Memo for the Multi-Asset Road Rehabilitation Project on State Route 1 and State Route 92, in San Mateo County*. November 18.

———. 2021f. *Caltrans 2020-2024 Strategic Plan.* Available online at: https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/sp-2020-16p-web-a11y.pdf. Accessed May 19, 2021.

———. 2021g. *Director's Policy 37 – Complete Streets.* Available online at: https://dot.ca.gov/-/media/dot-media/programs/sustainability/documents/dp-37-complete-streets-a11y.pdf.

———. 2021h. State Route 1 Multi-Asset Roadway Rehabilitation Project Aquatic Resource Delineation, San Mateo County, California, 04-01-SM-PM 27.5/34.8, EA 04-0Q130. Project ID 04-1800-0053.

———. 2021i. Area of Potential Effects, Multi Asset Road Rehabilitation Project, SM-1 27.5 – 34.8, 0Q130/0418000053.

———. 2022a. *Standard Environmental Reference, Chapter 13–Energy*. Available online at: https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-1-guidance-for-compliance/ch-13-energy. Accessed January 14, 2022.

———. 2022b. *Visual Impact Assessment for the State Route 1 Multi-Asset Roadway Rehabilitation Project*. Draft. January.

———. 2022c. *Multi-Asset Pavement Rehabilitation Project: Natural Environment Study*. April.

California Energy Commission (CEC). 2003. *State of California Energy Action Plan*. Available online at: https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2003-energy-action-plan.pdf. Accessed January 14, 2022.

———. 2021. *Integrated Energy Policy Report*. Available online at: https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report. Accessed January 14, 2022.

California Environmental Protection Agency. 2015. California Climate Strategy. Available online at: https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/Climate-Documents-2015yr-CAStrategy.pdf. Accessed April 28, 2021.

California Governor's Office of Planning and Research (OPR). 2015. A Strategy for California @ 50 Million. November. Available online at: https://opr.ca.gov/docs/EGPR_Nov_2015.pdf. Accessed January 12, 2022.

CalHerps. 2019. *A Guide to the Reptiles and Amphibians of California*. Available online at: http://www.californiaherps.com/index.html.

California Invasive Plant Council (Cal-IPC). 2021. The Cal-IPC Inventory. Available online at: https://www.cal-ipc.org/plants/inventory/. Accessed February 14, 2022.

California Native Plant Society (CNPS). 2021. *Manual of California Vegetation*. Available online at: https://vegetation.cnps.org/.

California Natural Resources Agency. 2021. Draft California Climate Adaptation Strategy. October 18. Available online at: https://resources.ca.gov/Initiatives/Building-Climate-Resilience/2021-State-Adaptation-Strategy-Update. Accessed December 12, 2021.

California Ocean Protection Council (OPC). 2018. *Sea Level Rise Guidance 2018 Update*. Available online at: https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf.

California State Transportation Agency. 2021. *California Action Plan for Transportation Infrastructure*. Available online at: https://calsta.ca.gov/-/media/calsta-media/documents/capti-july-2021-a11y.pdf. Accessed February 12, 2022.

City and County Association of Governments of San Mateo County (CCAG). 2014. *Airport Land Use Compatibility Plan for the Environs of Half Moon Bay Airport*. Available online at: https://ccag.ca.gov/wp-content/uploads/2014/10/HAF-ALUCP-Final.pdf.

City of Half Moon Bay. 2013. *2013 Circulation Element Update*.

———. 2020. *Local Coastal Land Use Plan*. April 15. Available online at: https://www.half-moon-bay.ca.us/DocumentCenter/View/3784/Full-Combined-2020-HMB-LCLUP. Accessed January 18, 2022.

———. 2022. General Plan for the City of Half Moon Bay. Available online at https://www.half-moon-bay.ca.us/155/General-Plan. Accessed November 8, 2022.

Climate Change Infrastructure Working Group. 2018. Paying it Forward: The Path Toward Climate-Safe Infrastructure in California. September. https://files.resources.ca.gov/climate/climate-safe-infrastructure-working-group/. Accessed December 13, 2021.

Federal Highway Administration (FHWA). 2019. Sustainability. Available online at: https://www.fhwa.dot.gov/environment/sustainability/resilience/. Last updated February 7, 2019. Accessed December 13, 2021.

———. No date. Sustainable Highways Initiative. Available online at: https://www.sustainablehighways.dot.gov/overview.aspx. Accessed August 21, 2019.

International Conference of Building Officials (ICBO). 1994. *International Building Code, Table 18-1-B, Classification of Expansive Soil*. May 1.

Jennings, M.R., and M.P. Hayes. 1994. Amphibian and reptile species of special concern in California. Final report to the California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California, under contract (8023). iii+255 pp.

National Marine Fisheries Services (NMFS). 2012. Final Recovery Plan for Central California Coast Coho salmon Evolutionarily Significant Unit. National Marine Fisheries Service, Southwest Region, Santa Rosa, California.

San Mateo County. 1986. *San Mateo County General Plan*. Available online at: https://planning.smcgov.org/general-plan.

———. 2012. Highway 1 Safety and Mobility Study. November. Available online at: https://planning.smcgov.org/sites/planning.smcgov.org/files/SMM_Ph_2_Study_Final_LR.pdf. Accessed February 2022.

———. 2013a. *San Mateo County General Plan Policies*. January. Available online at: https://planning.smcgov.org/sites/planning.smcgov.org/files/documents/files/SMC-GP%20Policies%202013.pdf. Accessed January 18, 2022.

———. 2013b. *Local Coastal Program Policies*. June 18. Available online at: https://planning.smcgov.org/sites/planning.smcgov.org/files/documents/files/SMC_Midcoast_LCP_2013.pdf. Accessed January 18, 2022.

———. 2015. *County of San Mateo Emergency Operations Plan, Basic Plan.* January. Available online at: https://hsd.smcsheriff.com/sites/default/files/downloadables/1%20-%20Emergency%20Operations%20Plan.pdf.

———. 2021. *Connect the Coastside, San Mateo County Midcoast, Comprehensive Transportation Management Plan, Final Draft – October 2021*. Available online at: https://planning.smcgov.org/sites/planning.smcgov.org/files/Connect%20the%20Coastside%20Final%20Draft_Oct%202021.pdf. Accessed May 24, 2022.

Spence, Brian C., Walter G. Duffy, John Carlos Garza, Bret Harvey, Susan M. Sogard, Laurie A. Weitkamp, Thomas H. Williams, and David A. Boughton. 2012. Historical occurrence of coho salmon (*Oncorhynchus kisutch*) in streams of the Santa Cruz Mountain region of California: response to an Endangered Species Act petition to delist coho salmon south of San Francisco Bay. NOAA Technical Memorandum NMFS-SWFSC-472. 113 pp.

State of California. 2018. California's Fourth Climate Change Assessment. Available online at: http://www.climateassessment.ca.gov/. Accessed December 12, 2021.

Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin Company, Boston, Massachusetts.

United States Department of Transportation (U.S. DOT). 2011. *Policy Statement on Climate Adaptation*. June. Available online at: https://web.archive.org/web/20111017070809/http://www.dot.gov/docs/climatepolicystatement.pdf. Accessed January 13, 2022.

———. 2014. Corporate Average Fuel Economy (CAFE) Standards. Available online at: https://www.transportation.gov/mission/sustainability/corporate-average-fuel-economy-cafe-standards. Accessed January 12, 2022.

United States Environmental Protection Agency (U.S. EPA). 2021a. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. December. Available online at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed January 12, 2022.

———. 2021b. *Fast Facts 1990-2019. EPA 430-F-21-011.* April. Available online at: https://www.epa.gov/sites/production/files/2021-04/documents/fastfacts-1990-2019.pdf.pdf. Accessed April 28, 2021.

———. 2021c. Sources of Greenhouse Gas Emissions Overview. Available online at: https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions. Accessed May 5, 2021.

———. 2021d. *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2019*. EPA 430-R-21-005. Available online at: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019. Accessed May 5, 2021.

———. 2021e. U.S. EPA Greenbook. *California Nonattainment/Maintenance Status for Each County by year for all Criteria Pollutants*. Available online at: https://www3.epa.gov/airquality/greenbook/anayo_ca.html.

United States Fish and Wildlife Service (USFWS). 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog. August. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83914.

———. 2006. Endangered and threatened wildlife and plants; designation of critical habitat for the California red-legged frog; and special rule exemption associated with final listing for existing routine ranching activities; Final Rule. 50 CFR Part 17. Available online at: https://www.ecfr.gov/current/title-50/chapter-I/subchapter-B/part-17/subpart-I/section-17.95
.

United States Geological Survey (USGS). 2022. *Mineral Resources Online Spatial Data*. Available online at: https://mrdata.usgs.gov/.

6.1 List of Technical Studies

California Department of Transportation (Caltrans). 2016. *Pavement Condition Report*.

———. 2021b. *Construction-Related Greenhouse Gas (GHG) Emissions Analysis Memorandum*. July 14.

———. 2021c. *Environmental Review for PAED Memorandum from Office of Hydraulics Engineering* July 14.

———. 2021d. *Multi-Asset Pavement Rehabilitation Project: Water Quality Study*. October.

———. 2021e. *Office of Cultural Resource Studies (OCRS) Section 106 Closeout Memo for the Multi-Asset Road Rehabilitation Project on State Route 1 and State Route 92, in San Mateo County*. November 18.

———. 2021h. State Route 1 Multi-Asset Roadway Rehabilitation Project Aquatic Resource Delineation, San Mateo County, California, 04-01-SM-PM 27.5/34.8, EA 04-0Q130. Project ID 04-1800-0053.

———. 2021i. Area of Potential Effects, Multi Asset Road Rehabilitation Project, SM-1 27.5 – 34.8, 0Q130/0418000053.

———. 2022b. *Visual Impact Assessment for the State Route 1 Multi-Asset Roadway Rehabilitation Project*. Draft. January.

———. 2022c. *Multi-Asset Pavement Rehabilitation Project: Natural Environment Study*. April.

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT H

Print Form

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Rm 113, Sacramento, CA 95814

☐ County Clerk
County of: _____
Address: _____

From:

Public Agency: Caltrans District 4
Address: 111 Grand Ave, Oakland, CA 94612
Contact: John Seal
Phone: 510-549-6091

Lead Agency (if different from above):
_____
Address: _____
Contact: _____
Phone: _____

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2022070140

Project Title: State Route 1 Multi-Asset Roadway Rehabilitation Project

Project Applicant: California Department of Transportation

Project Location (include county): State Routes 1 & 92 in San Mateo County

Project Description:

The California Department of Transportation (Caltrans) is proposing the State Route (SR) 1 Multi-Asset Roadway Rehabilitation Project (project) to rehabilitate existing pavement, improve existing traffic facilities, install Complete Streets elements, and install traffic operations system elements along SR 1 in San Mateo County, California. The project also proposes to install traffic operation system elements at two locations on SR 92 in San Mateo County, California.

This is to advise that the California Department of Transportation District 4 has approved the above
(☒ Lead Agency or ☐ Responsible Agency)

described project on 10/21/22 (date) and has made the following determinations regarding the above described project.

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☐ were ☒ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☐ was ☒ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs

Signature (Public Agency): _____ Title: Branch Chief, Caltrans District 4

Date: 10/21/22 Date Received for filing at OPR: 10/21/22

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2011

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT I

Table C-1. SR 1 0Q130 Avoidance and Minimization Measures

Category	Number	Task	Description	Timing	Mitigation for significant impacts under CEQA?
Biology	BIO-01	Riparian Vegetation Protection	All riparian habitat in the Project area will be delineated as an environmentally sensitive area (ESA), and no construction activities will occur outside of the immediate work area in riparian habitat ESAs. At the roadway crossings of Denniston, Frenchman's, and Pilarcitos Creeks, the California Department of Transportation (Caltrans) will limit riparian vegetation removal to the immediate work area. Trees or shrub trimming at those locations will be limited to removing only branches that overhang the roadway.	• Project Approval and Environmental Document (PAED) • Plans, Specifications, and Estimates (PS and E) • Construction	No
Biology	BIO-02	Seasonal Avoidance	Construction activities off paved surfaces in areas of potential California red-legged frog habitat (ESAs) will be performed between June 15 and October 15 to minimize impacts on this species. Designated staging areas may be used outside of this work window once cleared by a USFWS-approved biologist or their designee and fenced, as appropriate.	Construction	No
Biology	BIO-03	Proper Use of Erosion Control Devices	To avoid entanglement or injury of California red-legged frog or San Francisco garter snake, erosion control materials that use plastic or synthetic monofilament netting will not be used.	• PS and E • Construction	No
Biology	BIO-04	Avoidance of Entrapment	To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 1 foot deep will be covered at the close of each working day with plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks at an angle no greater than 30 degrees. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. All replacement pipes, hoses, culverts, or similar structures less than 12 inches in diameter will be closed, capped, or covered upon entry to the Project site. All similar structures greater than 12 inches must be inspected before they are subsequently moved, capped, and/or buried.	Construction	No
Biology	BIO-05	Biological Monitor	The names and qualifications of proposed biological monitor(s) will be submitted to the USFWS for approval prior to the start of construction. The USFWS-approved biological monitor(s) will keep a copy of the USFWS biological opinion in their possession when on site. Through communication with the resident engineer, the USFWS-approved biological monitor(s) will be on site during all work that could reasonably result in take of California red-legged frog or other special-status species. The USFWS-approved biological monitor(s) will have the authority to stop work that may result in the unauthorized take of special-status species. If the USFWS-approved biological monitor exercises this authority, the USFWS will be notified by telephone and e-mail message within one working day.	• PAED • PS and E • Construction	No
Biology	BIO-06	Pre-Construction/Daily Surveys	Pre-construction surveys for special-status species will be conducted by the USFWS-approved biological monitor no more than 14 calendar days prior to any initial ground disturbance and immediately prior to ground-disturbing activities (including vegetation removal and fence installation) in the Project footprint. These efforts will consist of walking surveys of the Project limits and, if possible, accessible adjacent areas within at least 50 feet of the Project limits. The USFWS-approved biological monitor will investigate potential cover sites when it is feasible and safe to do so. This includes thorough investigation of mammal burrows, rocky outcrops, appropriately sized soil cracks, tree cavities, and debris. Native vertebrates found in the cover sites within the Project limits will be documented and relocated to an adequate cover site in the vicinity, with the exception of fully protected species. Safety permitting, the USFWS-approved biological monitor will also survey areas of disturbed soil for signs of California red-legged frog or San Francisco garter snake within 30 minutes following initial disturbance of the given area. The need for further pre-construction surveys will be determined by the biologist based on site conditions and realized construction timelines.	• PAED • PS and E • Construction	No

Category	Number	Task	Description	Timing	Mitigation for significant impacts under CEQA?
Biology	BIO-07	Protocol for Species Observation	The USFWS-approved biological monitor(s) will have the authority to halt work through coordination with the resident engineer if California red-legged frog or San Francisco garter snake are observed in the Project footprint. The resident engineer will keep construction activities suspended in a 50-foot radius of the California red-legged frog or San Francisco garter snake in any construction area where the biologist has determined that a potential take of the species could occur. Work will resume after observed listed individuals leave the site voluntarily, the biologist determines that no wildlife is being harassed or harmed by construction activities, or the wildlife is relocated by the biologist to a release site using USFWS-approved handling techniques.	Construction	No
Biology	BIO-08	Handling of California Red-Legged Frog	If a California red-legged frog is discovered, the resident engineer and USFWS-approved biological monitor will be immediately informed. • If a California red-legged frog gains access to a construction zone, work will be halted immediately within 50 feet until the animal leaves the site or is captured and relocated by the USFWS-approved biological monitor. • The USFWS will be notified within one working day if a California red-legged frog or San Francisco garter snake is discovered in the construction site. • The captured California red-legged frog will be released in appropriate habitat outside of the construction area but near the capture location. The release habitat will be determined by the USFWS-approved biological monitor. • The USFWS-approved biological monitor will take precautions to prevent introduction of amphibian diseases in accordance with the Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog (USFWS 2005).	Construction	No
Biology	BIO-09	Rare Plant Survey	Caltrans will conduct a rare plant survey in the Biological Study Area (BSA) to determine the presence or absence of special-status plant species. To ensure that surveys are conducted at an appropriate time to identify all the target species, as many as three survey replicates will be performed. The survey replicates will be timed based on target species blooming periods and rainfall levels, but are targeted to occur in March, late April/May, and June of 2022. All plants will be identified to a level needed to verify protected status. Any listed plants discovered in the field will be mapped and included as ESAs in the final plans and specifications. Caltrans will consult with the appropriate wildlife agency with jurisdiction and will obtain necessary permits or authorizations if unavoidable take of a listed plant species incidental to the proposed work would occur.	• PAED • PS and E	No
Biology	BIO-10	Pre-Construction Plant Survey	A Project biologist with appropriate botany experience will perform a site survey in ESAs where construction disturbance could occur before start of work. Special-status plants will be flagged and avoided where possible. Caltrans will coordinate with appropriate wildlife agencies with jurisdiction prior to construction if incidental take of a listed plant species is unavoidable, and will obtain any necessary permits or authorizations for direct impacts. Caltrans will adhere to the requirements of all permits and authorizations issued for the Project.	• PAED • PS and E • Construction	No
Biology	BIO-11	Drainage Work Exclusion for Ornduff's Meadowfoam	Caltrans will avoid drainage system rehabilitation or other work in unpaved areas that could affect soil hydrology within 3,000 feet of where Ornduff's meadowfoam is known to occur. If Caltrans later determines that rehabilitating the drainage system at this location is necessary, it will complete a soil hydrology study, drainage system design, and mitigation plan in coordination with the California Department of Fish and Wildlife that result in no net loss of this species or its habitat.	• PAED • PS and E • Construction	No
Biology	BIO-12	Wetlands and Waters Construction Work Windows	Work in wetlands, waters, and riparian habitat will be limited to June 15 through October 15 to avoid or minimize impacts to waters of the United States, waters of the state, riparian habitat, and special-status species habitat.	Construction	No
Biology	BIO-13	ESAs	Wetlands, waters, riparian habitat, designated critical habitat, and special-status species habitat—including that of Ornduff's meadowfoam—will be delineated as ESAs on contract plans and defined in contract specifications. ESAs outside of the proposed work areas will be specifically identified to avoid during construction. Where work must occur in or adjacent to an ESA, an approved biologist with stop-work authority will be present.	• PAED • PS and E • Construction	No
Biology	BIO-14	ESA Fencing	Caltrans will install fencing to outline and protect ESAs prior to the start of construction. ESA provisions will be implemented as a first order of work and will remain in place until all construction activities are completed in the work area.	• PAED • PS and E • Construction	No

Category	Number	Task	Description	Timing	Mitigation for significant impacts under CEQA?
Cultural Resources	CUL-01	ESA Action Plan	• An ESA Action Plan will be developed for the Project to protect the two archaeological resources in the APE in their entirety. Before construction, the ESA Action Plan will be reviewed and approved by the Cultural Studies Office (CSO) at Caltrans' headquarters. The Caltrans archaeologist will ensure that the ESAs are included and described clearly in the environmental document. The ESAs will be included in the Project's Environmental Commitment Record. • The Caltrans archaeologist will work in coordination with the other responsible parties to ensure that the ESA is represented and depicted in the plans, specifications, and estimates package. The package and plans will be reviewed throughout the design process, so that the ESAs are accurately represented and depicted. The Caltrans archaeologist will ensure that the ESA Action Plan is included in the resident engineer's pending file. • All responsible parties will ensure that the ESAs are discussed during the preconstruction meeting, led by a qualified archaeologist and Native American tribes who may want to administer the training as well. The importance of the ESAs will be discussed with construction personnel, stressing that no construction activity (including storage of equipment or materials) may occur in the ESAs, and that workers must remain outside of the ESAs at all times. In addition, historic preservation laws that protect archaeological sites and artifacts against any disturbance or removal will be discussed. • The resident engineer will notify the Caltrans Office of Cultural Resource Studies staff (Caltrans project archaeologist) at least 2 weeks in advance of the start of construction. A field review of the ESA locations will be conducted. The Caltrans project archaeologist will mark the ESA locations with the contractor.	• PAED • PS and E • Construction	No
Cultural Resources	CUL-02	Construction Activities for ESA Protection	• Temporary, high-visibility fencing will be installed by the contractor at least 1 week before beginning any ground disturbance. The Caltrans archaeologist will coordinate this activity with the resident engineer. The Caltrans archaeologist will be present to supervise and monitor this activity. • The Caltrans archaeologist will conduct spot inspections and site visits to ensure the integrity of the ESAs. The Caltrans archaeologist will notify the State Historic Preservation Officer, CSO, and consulting Native American parties within 48 hours of any ESA, post-review discovery, or inadvertent effect, to immediately determine how the breach or discovery will be addressed.	Construction	No
Cultural Resources	CUL-03	Post-Construction Activities:	The resident engineer will inform the Caltrans archaeologist when construction is completed. The contractor, in coordination with the resident engineer and the Caltrans archaeologist, will remove the ESA fencing at the completion of construction.	Construction	No
Visual Resources	VIS-01	Guard Rail Finish	Caltrans will include a matte finish on guard rail exposed metal surfaces to reduce glare.	PS and E	No
Other	TRANS-01	Development of Transportation Management Plan	Caltrans will develop a Project-specific traffic management plan (TMP) during the final design phase of the Project. The TMP will be prepared in accordance with Caltrans requirements and guidelines to minimize construction-related delays and impacts on emergency vehicles and the traveling public. The TMP will include the following provisions: • Coordination with San Mateo County, the City of Half Moon Bay, and any other applicable local jurisdictions for notification of closures and detours • Coordination with California Highway Patrol (CHP) and other local law enforcement • Use of portable changeable message signs, the CHP construction zone enhanced enforcement program, one-way traffic controls, and flaggers • Continued access for emergency services • Continued access to any residential driveways	PS and E	No

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT J

Comment Letter R-3: County of San Mateo Planning and Building, Chanda Singh

COUNTY OF SAN MATEO
PLANNING AND BUILDING

County Government Center
455 County Center, 2nd Floor
Redwood City, CA 94063
650-363-4161 T
planning.smcgov.org

August 17, 2022

Via Email – john.seal@dot.ca.gov
Caltrans, District 4
Office of Environmental Analysis
ATTN: John Seal, Associate Environmental Scientist
P.O. Box 23660, MS: 8B
Oakland, CA 94623-0660

SUBJECT: Comments on the Draft Initial Study with Proposed Negative Declaration for the State Route 1 Multi-Asset Roadway Rehabilitation Project (EA 04-0Q130)

To Whom It May Concern:

R-3-1

San Mateo County appreciates the opportunity to submit the following comments on the San Mateo State Route (SR) 1 Multi-Asset Roadway Rehabilitation Project (EA 04-0Q130) Draft Initial Study with Proposed Negative Declaration (IS/ND) (https://dot.ca.gov/-/media/dot-media/district-4/documents/d4-environmental-docs/0q130-sr-1-multi-asset-roadway-rehabilitation/2022-07-07-0q130-ded-final-508-a11y.pdf). The Project seeks to rehabilitate existing pavement, improve existing traffic facilities, install Complete Streets elements, and install traffic operations system (TOS) elements along SR 1 from post mile (PM) 27.5 to PM 34.8, and install TOS on SR 92 at PM 0.2. We appreciate Caltrans' efforts in ongoing coordination with the County and finding opportunities to refine the Project to better meet community needs. The following comments are based on staff's review of the Project's IS/ND, the County's Certified Local Coastal Program, proposals in County plans, and County processes to inform the future Coastal Development Permit.

R-3-2

Community Needs, Project Description, and Ongoing Coordination
We appreciate that the Project intends to implement several of the much-needed complete streets improvements identified Connect the Coastside: the San Mateo County Midcoast Comprehensive Transportation Management Plan, adopted by the County Board of Supervisors adopted in July 2022, and the Unincorporated San Mateo County Active Transportation Plan. These include Class 2 bike lanes on SR 1, ADA curb ramp improvements, completing pedestrian crossings at SR 1 / Coronado Street, and others. We look forward to continued coordination with Caltrans during the Project's future phases to ensure consistency in implementation with Connect the Coastside's recommendations and continue to seek opportunities to leverage the Multi-Asset Project to further community goals.

We appreciate IS/ND's Section 1.4.9.1 Coordination with Local Transportation Plans, and Pedestrian Crossings on SR 1 at Surfer's Beach (p.1-13), which identifies the need to coordinate moving forward to evaluate a pedestrian crossing of SR 1 near Surfer's Beach.

R-3-2 Cont.

In addition to the County, coordination with the City of Half Moon Bay, County Harbor District, Granada Community Services District, and others will be necessary. We also recommend updating this section for the final environmental document to reflect that the Board of Supervisors adopted Connect the Coastside in July 2022. The County recently updated its webpage as well: to access Connect the Coastside, please visit: https://www.smcgov.org/planning/connect-coastside.

Section 1.4.9 Complete Streets (p.1-10) identifies that "Transit stops would be paved, and new sidewalks would be connected along SR 1." We encourage Caltrans to continue working with SamTrans to implement additional transit stop amenities as part of this project, such as benches, shelters, lighting, and bike racks. At minimum, we encourage Caltrans to ensure the design includes adequate pavement and sidewalk width for future transit stop amenities while maintaining ADA accessibility. This would be consistent with Connect the Coastside's recommendations to improve existing bus stops to create a safer and more comfortable waiting environment, given the long waiting times between buses.

During stakeholder engagement for Connect the Coastside, community members shared that there are opportunities to improve the culverts at Arroyo de en Medio in Miramar to support pedestrian crossings of SR 1. We encourage Caltrans to look for opportunities to address pedestrian access as part of the Project's culvert replacement and/or repair at this location.

Connect the Coastside includes data and evaluation recommendations, including providing annual reports on projects and conditions in the Plan's area. Section 1.4.6 describes locations for new traffic management systems that will provide data on conditions on SR 1 and SR 92. The County would like to coordinate with Caltrans to access and/or analyze this data for reporting and to support future project development.

In 2023, the County will be undertaking roadway projects in El Granada to improve school safety to Wilkinson School and El Granada Elementary School, including the addition of a stop sign with marked crossing on northbound Coronado Street at Avenue Alhambra. We can coordinate with Caltrans as needed.

R-3-3

Permitting

IS/ND Sections 1.8 Necessary Permits and Approvals (p.1-22), 2.2.11 Land Use and Planning (p.2-35), and 3.1.4 Coastal Zone Coordination (p.3-2) acknowledge that the project is in the coastal zone and would be governed in part by the County's Local Coastal Program (LCP) and that it must comply with the policies of the LCP. San Mateo County's LCP characterizes the proposed improvements as Public Works (LCP Policy 2.2(b)) and requires that all public works projects within the County's coastal zone obtain a Coastal Development Permit (CDP) or exemption from CDP requirements. The IS/ND should clarify that the proposed Project is partially within San Mateo County's CDP permit jurisdiction; however, any issued CDP will be appealable to the California Coastal Commission (CCC) (PRC Section 20603).

LCP Consistency

As part of the CDP process, it will be necessary for Caltrans to demonstrate consistency with the County's LCP. IS/ND Section 2.2.11 Land Use and Planning (p.2-34) includes a preliminary consistency analysis, with Table 2-4 (p.2-38) summarizing the Project's potential impacts per key components of the LCP. LCP Policy 2.48(b) requires roadway improvements be consistent with all applicable policies of the Local Coastal Program, including, but not limited to, the Sensitive Habitats Component. Potential LCP consistency issues are described further below:

Sensitive Habitats Components

LCP Policy 7.1 defines sensitive habitats as any area in which plant or animal life or their habitats meets certain criteria, including habitats containing or supporting "rare and endangered" species as defined by the State Fish and Game Commission. Applicable policies include but are not limited to Policy 7.3 Protection of Sensitive Habitats, Policy 7.5 Permit Conditions, and Policy 7.42 Development Standards. Section 2.2.4 Biological Resources (p.2-7) states that the biological study area (BSA) is the Project's footprint, along with buffer areas that construction activities may directly or indirectly impact. Section 2.2.4.1(a) (p.2-8) states that the BSA contains potential habitat for special-status species that have moderate to high potential to occur. As part of the permit process, Caltrans will need to coordinate closely with the County to avoid, minimize and mitigate temporary and permanent impacts to sensitive habitats and species, including implementation of the IS/ND's identified avoidance and minimization measures.

R-3-4

Public Works Components

LCP Policy 2.50 Improvements for Bicycle and Pedestrian Trails (h) states, "Ensure that no roadway repair or maintenance project blocks or damages any existing or formally planned public trail segment or, if such an impact is not avoidable, that an equal or better trail connection is provided in conjunction with that repair and maintenance project either directly by CalTrans or through CalTrans' funding to a third party." As part of the permit process, it will be necessary to demonstrate consistency and that the proposed project will not preclude implementation of adopted plans.

Section 1.4.10 Utility Relocation states "existing utilities may need to be relocated during construction" (p.1-13). The Montara and Granada Lighting Districts have lighting facilities along SR 1. Care must be taken to protect the existing light poles and any wiring associated with them during construction. At the time Caltrans intends to seek a Coastal Development Permit, project plans will need to state that any damages to the Lighting District facilities during construction shall be repaired by the Contractor per the Lighting District standard details and at the Contractor's expense; and the Lighting Districts must be notified of any damages to the lighting facilities and any repairs must be inspected by Lighting District representatives. The Lighting Districts will review for consistency.

Visual Resources Component

LCP Policy 8.30(b) designates SR 1 north of Half Moon Bay as a County Scenic Corridor; therefore, LCP Policy 8.31 Regulation of Scenic Corridors in Rural Areas applies to the

R-3-4 Cont.

project, which includes application of policies of the Scenic Road Element of the County General Plan, rural design policies of the LCP, and section 6325.1 of the Resource Management Zoning District as special regulations protecting scenic corridors in the Coastal Zone. The Project includes guardrail replacement (Section 1.4.3) to standard Midwest guardrail systems and incorporation of flush and raised median treatments where feasible (Section 1.4.9). IS/ND Section 2.2.1 Aesthetics (p.2-2) states that the guardrail finish will include a matte finish on exposed metal surfaces to address reflectivity; it does not discuss potential materials for the medians. As part of the CDP process, Caltrans will need to demonstrate consistency with the policies above, ensuring coastal views are not impacted and materials chosen will align with stated policies.

R-3-5

Hydrology and Water Quality

Section 1.47 Drainage Inlet, Culvert, and Dike Replacement (p.1-9) describes the anticipated work based on a preliminary review of existing drainage elements. Section 2.2.10 Hydrology and Water Quality (d) (p.2-33) states a single location on SR 1 at Surfer's Beach is susceptible to tsunami and seiche inundation and is in a Federal Emergency Management Agency (FEMA) management system for sites with potential to affect water quality in the project area. FEMA FIRM panel 06081C0138F lists flood zone AE for El Granada Creek (also known as Deer Creek) and Denniston Creek. Please confirm that the culverts at these creeks, at approximately PM 32.7 and PM 33.4 respectively, were included in the assessment of existing drainage facilities, as the impacts to flood hazard areas should be accounted for if these culverts require replacement.

R-3-6

Land Use and Planning

The County is in the process of developing Plan Princeton (https://www.smcgov.org/planning/plan-princeton). The purpose of this project is to make a comprehensive update to the policies, plans, and standards regulating the Princeton area, including an update to the land use plan for Princeton. The County suggests referencing the draft Plan in the final environmental document, and specifically as part of Section 2.2.11 Land Use and Planning (p.2-34).

R-3-7

Transportation

Section 2.2.17 Transportation (a) on p.2-48 references consistency with applicable plans. The section should reference and evaluate consistency with the 2021 Unincorporated San Mateo County Active Transportation Plan, 2022 Connect the Coastside, and Plan Princeton (draft).

Section 2.2.17 Transportation (d) includes TRANS-01: Development of a Transportation Management Plan (p.2-49) as a proposed avoidance and minimization measure. The County looks forward to coordinating with Caltrans on the Plan and requests a minimum of three weeks for the County to review and comment on the draft Transportation Management Plan prior to finalization.

R-3-8

Geology and Soils

Section 2.2.7.1 Geology and Soils (c) (p. 2-24) discusses unstable soil conditions and refers to future geotechnical and geological study during the final design phase. The potential hazards discussed in this section did not include coastal effects, including but not limited to bluff retreat, coastal erosion, and sea level rise. The County notes that some of these hazards are preliminarily discussed in the Section 2.3 Climate Change (comments below). Additional evaluation should be included in the future geotechnical and geological study in collaboration with the County's geotechnical reviewer.

Section 2.2.7.1 (d) cites the Uniform Building Code (1994) as the reference section. In the future geotechnical and geological study, Caltrans should use current code sections to guide investigations and design.

R-3-9

Climate Change

Section 2.3 Climate Change (p.2-58) describes applicable policies and the project's potential impacts. As described in Section 2.3.5.1 Sea-Level Rise Analysis, the IS/ND uses a high emissions scenario with a 1-in-20 probability of 4.4 feet of sea level rise by 2100 for its analysis (closest scenario is 5 ft in the NOAA viewer and 4.9 ft with 100-year storm in the OCOF viewer). The State of California Sea-Level Rise Guidance 2018 Update (Guidance) generally recommends decisionmakers use the medium-high, or 1-in-200 probability, sea-level rise projection for "longer lasting projects with less adaptive capacity and medium to high consequences should sea-level rise be underestimated" (p.27). The Guidance further recommends using an extreme risk aversion scenario (10.2 ft of SLR by 2100) for critical infrastructure. However, the Guidance provides flexibility to choose scenarios based on the lifespan of the project and risk tolerance.

San Mateo County's Local Hazard Mitigation Plan uses a scenario of 6.6 feet with 100-year storm by 2100 for its analysis (this is the closest available OCOF data comparable to a high emissions scenario with a 1-in-200 probability or 6.9 ft of SLR). This scenario puts the water level along the border of SR 1. If using an extreme risk aversion scenario (9.8 feet sea level rise in the OCOF viewer), sections of SR 1 around Surfer's Beach are inundated by water with or without the 100-year storm. In addition to inundation, the Our Coast Our Future Hazard Map (https://ourcoastourfuture.org/hazard-map/) shows cliff retreat (erosion) overlapping with Highway 1 at 2.5 feet of sea level rise. Under the IS/ND's 1-in-20 probability scenario, 2.4 feet of sea level rise would occur by 2070. Under the 1-in-200 probability scenario used by the County for its Local Hazard Mitigation Plan, 2.6 feet of sea-level rise would occur by 2060. Under the extreme risk aversion scenario, 2.7 feet of sea-level rise would occur by 2050.

The IS/ND states on p.2-71 that "Surfer's Beach adjacent to SR 1 in the community of El Granada is vulnerable to erosion and wave run up at locations under the sea level rise scenarios examined for this analysis. However, the projected sea level rise scenario to the end of the century would extend beyond the service life of the proposed pavement work at this location." Caltrans should clarify the service life of the Project's various components, especially in the Surfer's Beach area, to justify the use of the 1-in-20 probability scenario.

R-3-9 Cont.

The IS/ND goes on to state on p.2-71 "Flood risk management at Surfer's Beach to address inundation of these adjacent features over the long term would require substantial shoreline protection efforts that are outside the purpose and need, and the service life of the work proposed for the project. Caltrans welcomes coordination and expects to participate in discussions with stakeholder groups to identify long term solutions to address sea level rise at Surfer's Beach that may also affect the existing transportation facilities." Inundation and soil erosion has been and will continue to be a concern that principally impacts SR 1. The County looks forward to Caltrans taking a leadership role in bringing stakeholders together to identify long term solutions that preserve access and mobility.

R-3-10

Errata

In our review, we found a few discrepancies that Caltrans should consider revising for clarity in the final environmental document:

- Section 1.8 Necessary Permits and Approvals: Table 1-3 (p.1-22) should list appropriate agency as "San Mateo County," not "San Mateo County Local Coastal Plan". Similarly, the appropriate agency should be listed as "City of Half Moon Bay," not "City of Half Moon Bay Local Coastal Plan."
- Section 2.2.13.1 Noise (a) on p.2-43, references "the closest sensitive noise receptors would be residences and commercial businesses in the Moss Beach, El Granada and Miramar areas of Half Moon Bay..." This should be revised as it conflates unincorporated communities with Half Moon Bay. Suggested revision: "The closest sensitive noise receptors would be areas within 0.5 miles north and south of project locations, including residences and commercial businesses in the unincorporated communities of Moss Beach, Princeton, El Granada, and Miramar, and areas in the City of Half Moon Bay."
- Section 2.2.21 Mandatory Findings of Significance (b), references findings from the Highway 1 Safety and Mobility Improvement Study. We suggest expanding this language to additional plans that include recommended projects, such as Connect the Coastside, Plan Princeton (draft), and the Unincorporated San Mateo County Active Transportation Plan.

Sincerely,

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Response to Comment Letter R-3: County of San Mateo Building and Planning

R-3-1. Thank you for your introductory statements. Please see the ensuing comment responses.

R-3-2. Caltrans appreciates the input on the Build Alternative and looks forward to continued coordination with San Mateo County and SamTrans on Project elements that serve common goals.

Regarding updates to Section 1.4.9.1, the final Initial Study has been revised to update this section, providing a link to the current Connect the Coastside webpage.

Regarding recommendations for the transit stop amenities, Caltrans will coordinate with SamTrans during the final design phase to consider elements that are appropriate for inclusion in the final build.

Regarding the use of drainage culverts for pedestrian passage, please see the responses to Comments I-13-1 and I-16-1. Drainage culverts are not intended for pedestrian passage and are not a safe use of this facility. Caltrans does not condone, support, or approve of pedestrian passage through its drainage systems. Please do not enter drainage culverts.

Regarding traffic data sharing, Caltrans traffic cameras can be viewed online at the Caltrans QuickMap web page (https://quickmap.dot.ca.gov/), and camera livestreams can be viewed for shorth durations at https://cwwp2.dot.ca.gov/vm/iframemap.htm.

Additionally, traffic data collected by the Project would be posted on Caltrans' performance measurement system (PeMS) site https://pems.dot.ca.gov/. Access to the PeMS site is subject to Caltrans approval of an application for site use and Caltrans' terms of use for the site. Currently, there are no data being collected on SR 1 in the Project area available on PeMS because there are no sensors in place for traffic data collection. The Project is proposing TOS elements to address this gap in data collection on SR 1 in the Project area to better inform traffic planning decisions along this corridor. Caltrans and San Mateo County OES have been working together to better integrate incident management operations between the two agencies. Initial efforts have centered around the San Mateo Smart Corridor and the Peninsula cities. One of the key initial activities is to establish a connection to the County EOC building and the Caltrans fiber-optic system that will allow for future sharing of information, including SMC alerts and emergency vehicle preemption to supplement current practices.

Regarding coordination on El Granada roadway project that may intersect efforts in the Caltrans right-of-way, Caltrans looks forward to continued efforts and partnership with San Mateo County.

R-3-3. Caltrans understands that the Project partially occurs within the Coastal Zone that is governed by San Mateo County's LCP. A Coastal Development Permit through San Mateo County's LCP was included in Section 1.8, Table 1-3. Caltrans also understands that any issued Coastal Development Permit may be appealed to the California Coastal Commission, but this scenario is not an assumed course for permit processing. Clarification has been added to Table 1-3, in accordance with the recommendations provided in San Mateo County's comments.

R-3-4. Caltrans appreciates the early technical assistance provided in these comments. Caltrans will work with all agencies with jurisdiction during the Project's final design and permitting phase to provide a complete and appropriate description and analysis of the build alternatives refined design at that stage. Caltrans looks forward to coordinating with San Mateo County, the City of Half Moon Bay, and California Coastal Commission staff during the permitting stage.

R-3-5. No culvert replacement or other instream work is anticipated at Denniston Creek or Deer Creek. The existing culverts at Denniston Creek and Deer Creek were evaluated during field visits in 2019 and found to be in good condition. Therefore, no culvert replacement is proposed at these locations.

R-3-6. Thank you for making Caltrans aware of the scoping work that has been developed by San Mateo County. Please note that the draft plan referenced in this comment does not appear to be posted at the website link provided (checked on September 12, 2022). However, other Project information was available, and it appears that San Mateo County's Plan Princeton Project primarily addresses land use outside of the Caltrans right-of-way, but also includes some recommendations for bicycle, pedestrian, and signage improvements within Caltrans' right-of-way. Caltrans looks

forward to coordinating with and providing oversight on any county plans for improvements that would occur within Caltrans' right-of-way. Caltrans invites the county to reach out to Caltrans to make us aware of any plans or issues where Caltrans input is appropriate. Because there are no land use designations in the Plan Princeton document showing in the Caltrans right-of-way, and the proposed Build Alternative for Caltrans' Project would not impact the existing or proposed land uses, the county's study is not referenced in the final Initial Study.

R-3-7. Thank you for this comment. Caltrans looks forward to coordination with San Mateo County.

R-3-8. Please note that the responses provided in Section 2.2.7 are within the context of the CEQA Guidelines, which identify specific hazards related to geology and soils. Caltrans understands that hazards such as bluff retreat, coastal erosion, and sea-level rise are present in the SR 1 corridor. The Project proposes to extend the lifespan of roadway facilities. However, this does not preclude future projects from studying and making improvements to address long-term threats such as sea-level rise.

R-3-9. Caltrans states in its Project description that the Project is proposing a 20-year flexible rehabilitation strategy. This means that the useful life of the repaved roadway would be 20 years after construction. Caltrans believes that the analysis provided and the assumptions made in selecting a risk scenario are appropriate.

R-3-10. Thank you for these additional considerations.

- Section 1.8, Table 1-3, has been revised as San Mateo County recommended.
- Section 2.2.13.1 has been revised to refer to Moss Beach, El Granada, and Miramar as communities, rather than "areas of Half Moon Bay."
- Section 2.2.21 has been updated to describe local plans and projects that are relevant to the SR 1 corridor, including the plans described in this comment. Please refer to Table 2-7.