01-0C550 Navarro Safety Mendocino County Coastal Zoning Code Section 20.532.060 Report of Compliance to support the Coastal Development Permit Application

Report of Compliance, Section 20.532.060 Mendocino County Coastal Zoning Code	
 (A) Topographic Base Map. The base map shall be at a scale sufficiently large to permit clear and accurate depiction of vegetative associations and soil types in relation to any and all proposed development (normally the scale required will be 1" = 200'). Contour intervals should be five (5) feet, and the map shall contain a north arrow, graphic bar scale, and a citation for the source of the base map (including the date). The map shall show the following information: (1) Boundary lines of the applicant's property and adjacent property, including assessor's parcel numbers, as well as the boundaries of any tidelands, submerged lands or public trust lands; 	The Plans submitted with the original application contains layouts showing topography in the project area. The Drainage Report included with this application (July 2020) also contains topographical maps for the project area. The NES contains habitat maps showing the vegetative associations across the project area in Sheets A-6 through A-9. Property lines, including APNs, are shown on the Right of Way Appraisal map provided with this application. This map shows parcel lines in relation to the proposed project and was sourced from the Caltrans GIS.
(2) Names and locations of adjacent or nearby roads, streets or highways, and other important geographic, topographic and physical features;	The project is proposed for State Route 1 between Post Miles 41.8 and 42.3. This is just south of the intersection of State Route 1 and Navarro Ridge Road, and largely adjacent to the Navarro Point Preserve.
(3) Location and elevation of any levees, dikes or flood control channels;	There are no such structures in the project area.
(4) Location, size and invert elevation of any culverts or tide gates.	The Plan Set, Cross Sections, and Drainage Report provided with this application shows the location and elevations of all culverts to be replaced or repaired as part of this project.

Report of Compliance, Section 20.532.060 Mendocino County Coastal Zoning Code	
(B) Inundation Map. For nontidal wetlands, a map should be prepared indicating permanent or seasonal patterns of inundation (including sources) in a year of normal rainfall.	The Natural Environment Study (NES) indicated there were no wetlands in the project area. The ditches and drainages are classified as "other waters of the U.S". A wetland located outside of the southwest edge of the project area, and another on the northeast corner, will be protected from disturbance by Temporary High

 (C) Vegetation Map. Location and names of plant species (e.g., <i>Salicornia virginica</i>) and vegetation associations (e.g., saltmarsh). This map shall be prepared by a qualified ecologist or botanist. (D) Soils Map. If no soil survey is available, a soils map shall be prepared by a qualified soils scientist, and should show the location of soil types and include a physical description of their characteristics. 	Visibility Fencing. Mapping of these features is available in the NES and the project plans. The Natural Environment Study provides species lists and descriptions of each site. No further species information is included here. A Soils Map was created from the U.S. Department of Agriculture's Soil Web website and provided here. This map is not intended to provide site-specific soil characterizations at individual locations but does provide a landscape level snapshot of the soil types in the area. The map includes tabular data and descriptions of the soil types and the area of each type within the area surrounding project boundaries.
Report of Compliance, Section 20.532.060 Mendocino County Coastal Zoning Code(E) Report of Compliance. A report based upon an on-site investigation which demonstrates that the development meets all of the criteria specified for development in, and proximate to, an environmentally sensitive habitat area including a description and analysis of the following performed by a qualified professional:(1) Present extent of the habitat, and if available, maps, photographs or drawings showing historical extent of the habitat area.The NES and Environmentally Sensitive Habitat Areas (ESHA) Report submitted with the initial application identifies the potential ESHA locations and provides mapping of each of the habitats identified within the project area in maps A-6 through A-9.	
 (2) Previous and existing ecological conditions. (a) The life history, ecology and habitat requirements of the relevant resources, such as plants, fish and wildlife, in sufficient detail to permit a biologist familiar with similar systems to infer functional relationships (the maps described in above may supply part of this information). 	 a) The NES includes a discussion of habitat alliances and species of concern with potential to occur within the project area, as well as descriptions of each of the ESHAs. The ESHA report contains further descriptions of each of the identified ESHA within the project area. b) Avoidance and minimization measures are provided in the NES and ESHA report provided as part of the Erosion Control Plan. Appropriate

Report of Compliance, Section 20.532.060	Mendocino County Coastal Zoning Code
(3) Present and potential adverse physical and biological impacts on the ecosystem.	The potential impacts resulting from the proposed project are discussed in the NES, ESHA Report, and Categorical Exemption submitted with the application. No additional impacts other than those discussed in the NES and CE are anticipated as a result of the proposed widening and shoulder installation. No additional impacts have been identified as part of this analysis.
(4) Alternatives to the proposed development, including different projects and alternative locations.	The proposed project, its purpose, need, and any alternatives are discussed in the project description submitted as part of this application.
(5) Mitigation measures, including restoration measures and proposed buffer areas.	Avoidance and Minimization Measures are outlined in the NES, ESHA Report, and CE provided in the initial submittal.
 (6) If the project includes dredging, explain the following: (a) The purpose of the dredging. (b) The existing and proposed depths. (c) The volume (cubic yards) and area (acres or square feet) to be dredged. (d) Location of dredging (e.g., estuaries, open coastal waters or streams). (e) The location of proposed spoil disposal. (f) The grain size distribution of spoils. 	No Dredging Proposed or Required
 (g) The occurrence of any pollutants in the dredge spoils. (7) If the project includes filling, identify the type of fill material to be used, including pilings or other structures, and specify the proposed location for the placement of the fill, the quantity to be used and the surface area to be covered. 	The attached project description includes a discussion of the cut and fill requirements of the proposed project. Approximately 14,075 cubic yards of material would be removed from the east side of the road to provide space for the proposed widening project. Approximately 3,858 cubic yards of that material would be used on the west side of SR 1 to accommodate the

Report of Compliance, Section 20.532.060 Mendocino County Coastal Zoning Code	
	proposed shoulder widening. The remaining 10,217 yards of excess material would be moved off site to an approved disposal site.
8) If the project includes diking, identify on a map the location, size, length, top and base width, depth and elevation of the proposed dike(s) as well as the location, size and invert elevation of any existing or proposed culverts or tide gates.	AC Dikes along the edge of the road will be replaced as necessary. No large dikes for flood control are proposed.
(9) If the project is adjacent to a wetland and may cause mud waves, a report shall be prepared by a qualified geotechnical engineer which explains ways to prevent or mitigate the problem.	No element of the project has the potential to create mud waves. No wetlands exist within the project boundaries that would be susceptible to this type of impact.
(10) Benchmark and survey data used to locate the project, the lines of highest tidal action, mean high tide, or other reference points applicable to the particular project.	The layouts provided with the initial application show work areas. All work takes place within the Right of Way of SR 1 or Right of Way Acquisitions adjacent to the existing road and are well above tidal action areas.
(11) Other governmental approvals as required and obtained. Indicate the public notice number of Army Corps of Engineers permit if applicable.	CDFW 1602 Permit Army Corp of Engineers 404 permit Regional Water Quality Control Board 401 Certification

VISUAL IMPACT ASSESSMENT Navarro Ridge Safety Project

November 13, 2018 California Department of Transportation 01, MEN, 1 PM 41.8/42.3 0112000300 EA 01-0C550

Prepared by:

11-13-18 Date:

Jessica Bailey Landscape Architect License # 4622 Project Landscape Architect

sanarato Approved by:

Date:

Laura Lazzarotto Landscape Architect License # 4045 Engineering Services Branch District 1

Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

VISUAL IMPACT ASSESSMENT Navarro Ridge Safety Improvement Project

PURPOSE OF STUDY AND ASSESSMENT METHOD

The purpose of this visual impact assessment (VIA) is to document potential visual impacts caused by the proposed project and propose measures to lessen any detrimental impacts that are identified. Visual impacts are demonstrated by identifying visual resources in the project area, measuring the amount of change that would occur as a result of the project, and predicting how the affected public would respond to or perceive those changes. This visual impact assessment follows the guidance outlined in the publication *Visual Impact Assessment for Highway Projects* published by the Federal Highway Administration (FHWA) in March 1981.

PROJECT DESCRIPTION

The Project's Objective is to reduce the number and severity of collisions by improving the roadway geometry, increasing the shoulder width, install rumble strips, and install a Midwest Guardrail System (MGS). Caltrans proposes to make safety improvements and perform rehabilitation in Mendocino County on "SR1" from post mile (PM) <u>41.8 to PM 42.3</u>. The project proposes to widen the existing lanes to 12 feet, widen the existing shoulders in both directions to 4 feet, install edgeline and centerline rumble strips, install a Midwest Guardrail System (MGS), improve the superelevation, and remove trees. Work will also involve installing four new culverts, replacing three existing culverts, installing nine new drainage inlets (DIs), removing nine DIs, and extending five culverts.

At PM 41.79, the existing 6-foot box culvert will remain at the same location. At PM 41.83, the existing 18-inch culvert will be abandoned, the existing slot drain and DIs will be removed, four new DIs, three new 24-inch culverts and 18-inch culverts will be installed. At PM 41.95, the existing 18-inch culvert will be removed, and a new DI will be installed. At PM 41.98, the existing 18-inch culvert will be extended, the existing DI will be removed, and a new DI will be installed. At PM 41.98, the existing 18-inch culvert will be extended, the existing DI will be removed, and a new DI will be installed. At PM 42.02, the existing 24-inch culvert will be replaced and extended, the existing DI will be removed, and a new DI will be installed. At PM 42.11, the existing 18-inch culvert will be replaced and extended, the existing DI will be removed, and a new DI will be replaced and extended, the existing DI will be removed, and a new DI will be installed.

The construction of the new shoulders will involve the excavation of existing material and the placement of a new structural section. The structural section will consist of 1.30 feet of class 2 aggregate base, 0.40 foot of hot mix asphalt (type A), and 0.08 foot of bonded wearing course (BWC-G). This structural section will help seal longitudinal pavement joints and provide a good surface for receiving new striping. A layer of geosynthetic pavement interlayer (GPI) will be used at the pavement joint where the new section meets the existing material.

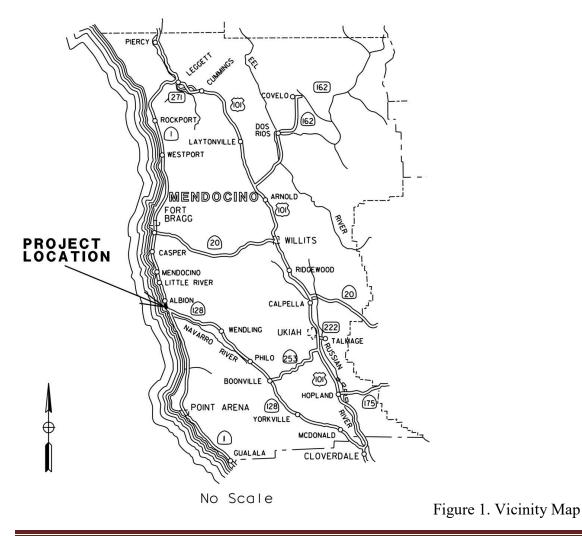
The new MGS installed from PM 42.11 to PM 42.30 will include both standard sections and 7-foot post segments in narrow roadway locations. Also, a new Omit One Post (MGS) will be installed from PM 41.78 to PM 41.80 to span the inlet and outlet of the 6-foot box culvert on both sides of State Route (SR) 1. The MGS to be installed within the project limit will be treated with a light-brown stain to reduce glare and to blend the MGS into the visual character of the natural landscape.

Erosion has been occurring below the culvert outlet at PM 42.11. To prevent further erosion at this location, which could compromise the highway; the existing downdrain, which is failing, will be removed and replaced with a rock-lined ditch and ¼ ton of rock slope protection (RSP). The existing culvert at this location, which is also failing, will be replaced.

Below many of the existing cutslopes, an inboard ditch carries storm water between culvert inlets. An additional 2 feet of widening beyond the shoulder is included to provide space for this water.

Sixty two (62) trees are to be removed on State Right Of Way and thirteen (13) trees are to be removed on Temporary Construction Easement (TCE) respectively. The majority of tree removal will take place between STA SMEN01 19+50 – 26+00.

The anticipated traffic control measures are reversable traffic control, moving lane closure, and shoulder closure. One-lane closure is permitted within the project limits. A minimum of 12 feet of paved roadway must be open for use by public traffic. Bicyclists will be accommodated through the work zone. Signage will be used to alert vehicle operators to the possible presence of bicyclists. The estimated maximum delay during one-way reversing traffic control will be 10 minutes. Access to side roads and residences will be maintained at all times.



PROJECT LOCATION AND SETTING

The project location and setting provides for the context for determining the type of changes to the existing visual environment. The proposed project is located on State Route 1 (SR 1) between PM 42.3 and PM 41.8 in Mendocino County south of the community of Whitesboro California.

The project is within the Coastal Zone, and is considered a sensitive corridor in regard to visual and scenic resources by the California Coastal Commission and Mendocino County. The Route is eligible for designation as a State Scenic Highway. The County recommends that the entire length of SR 1 located within the county be designated as a Scenic Highway. Moreover, under the Scenic Highways Element of the County's General Plan, many visual elements within the project site are considered scenic resources including rural-open grazing or grassland, inland hills, valleys and ridges, river views, seascape, and natural wildlife and wildlife habitats. There are enduring views of the ocean throughout the highway corridor. The North Coast Heritage Corridor includes the entirety of SR 1 in the county. The Route is also legislatively designated as part of the Pacific Coast Bike Route. The Pacific Coast Bike Route is internationally known, and is traveled extensively in the summer months by cyclists from multiple countries.

The project corridor of SR 1 corridor in Mendocino County passes through the Northern California Coast Section of California eco-regions. The landscape types include coastal bluffs, coastal prairie, coastal scrub, riparian forest, mixed conifer forest, rural agriculture, and small community development. *The project corridor is defined as the area of land that is visible from, adjacent to, and outside the highway right-of-way, and is determined by topography, vegetation, and viewing distance.*

SR 1, the Pacific Coast Highway, is one of the most traveled highways in the United States by tourists. SR 1 runs from the Orange County city of Dana Point in southern California to the town of Leggett in Mendocino County in northern California.



Figure 2. Project limits

VISUAL RESOURCES AND RESOURCE CHANGE

Visual resources of the project setting are defined and identified below by assessing *visual character* and *visual quality* in the project corridor. *Resource change* is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed project.

The proposed MGS on the west side of the highway, project **will not** be compatible with the existing visual character of the corridor because it inhibits coastal views. All other aspects of the project **would be** compatible with the existing visual character of the corridor. The visual character at the project location is characterized by coastal steppe vegetation with expansive views of the Pacific Ocean.



Figure 3. View from SR 1 looking northbound.

The visual quality of the existing corridor **will** be altered by the proposed project due to the addition of MGS on the southbound side of the highway. The addition of MGS will interrupt the intactness of views of the ocean. The unity of view would be reduced by the addition of the MGS which would introduce a metallic element in an area dominated by natural forms, textures, and colors.

The cut slopes proposed are consistent with existing cuts in the same locations on the northbound side of the highway corridor and throughout the SR 1 corridor.

The proposed 4' shoulder widening work on both the south bound and north bound directions will increase scale of views of the roadway but not significantly.

The trees to be removed are a mix of Bishop Pine and Monterey Pine. All but 3 of the proposed 62 trees to be removed are on the southbound side of the highway. There are many dead and dying Monterey Pines of various sizes among the trees to be removed. See figures 12-16. Removal of these trees, which screen views of the ocean, would increase unity and intactness of views of the ocean. The removal of trees would increase vividness of the project corridor by increasing continuity of ocean views.

Resource Change as measured by the overall change to visual character and visual quality will be *moder-ate-low*.

VIEWERS AND VIEWER RESPONSE

Neighbors (people with views *to* the road) and *highway users* (people with views *from* the road) will be affected by the proposed project. Viewer response is defined by viewer exposure and viewer sensitivity. Viewer exposure is composed of three factors which include proximity, quantity, and duration of views.

Highway users consist of local traffic by vehicle, non-local commercial traffic, recreational travelers, and pedestrian and bicycle traffic. These viewers have short duration of views but close proximity to proposed project elements which make viewer exposure *moderate*. Viewers on the highway are highly aware of the scenic quality and character of the area making viewer sensitivity *moderate-high*. The overall viewer response would be *moderate-high*.

Neighbors of the project consist of people using the recreational trails at the Navarro Point Preserve and Scenic Tail (NPPST) and residences located along Nonella Lane and at the northern end of the project limits at PM 42.33. The residences are largely screened from views of the highway by topography and trees. Their views are oriented west to the ocean but they may have partial views of the highway looking north-east or south-east. All the residences in the project corridor are set back from the highway 500 feet or more. See figures 4 & 5. The lack of clear views of the proposed project and the distance make the neighbors exposure low although the sensitivity of residents would high. The overall viewer response by neighbors is therefore *moderate-low*.

The entrance to the NPPST is located at the southern end of the project limits at PM 41.93. See figure 4. Trail users at the NPPST would have direct views of the project limits between PM 41.77 and PM 42.18 and proposed MGS and cut and fill slope construction. The trail is oriented to the west to views of the ocean. Trail users would have views of the proposed project elements when parking and returning to the parking lot making exposure *moderate-low*. Trail users are attracted to the area to enjoy the natural character and views of the ocean, therefore these users would have high viewer sensitivity. The overall viewer response of trail users would be *moderate*.

the California Coastal Commission (CCC). The document titled <u>Public Resource Code Division 20 of the</u> <u>California Coastal Act it is stated in Section 30251 Scenic and Visual Qualities</u> states "The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance...development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas".

Combining all viewers, it is anticipated that the overall viewer response would be *moderate*.



Figure 4. Neighbors of the project corridor.



Figure 5. Adjacent Residence above highway.

VISUAL IMPACT

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. The high scenic quality, natural character, and views of a scenic resource, the Pacific Ocean, plus the high viewer response combined create a moderate level of visual impacts for the proposed project elements. See figures 6-16.

There will be temporary visual impacts of the construction work. This will include various temporary signage, construction equipment, and crews working.

The no-build alternative would not change the quality or character of views with new built elements. However, it is likely that roadway failures may result without the needed improvements proposed in this project. If repairs are made as an emergency project, visual impacts will be difficult to minimize or avoid.



Figure 6

View before MGS installation at PM 41.79.

Figure 7

After MGS installation without staining.





Figure 8

After MGS Installation without staining.



Figure <mark>9</mark>

View before MGS installation at PM 42.30

Figure 10

After MGS installation without staining.



Figure 11

After MGS Installation without staining.



Figure 12 Tree removal locations.



Figure 13 View looking southbound of trees to be removed adjacent to the roadway.



Figure 14 View looking northbound of trees to be removed adjacent to the roadway.

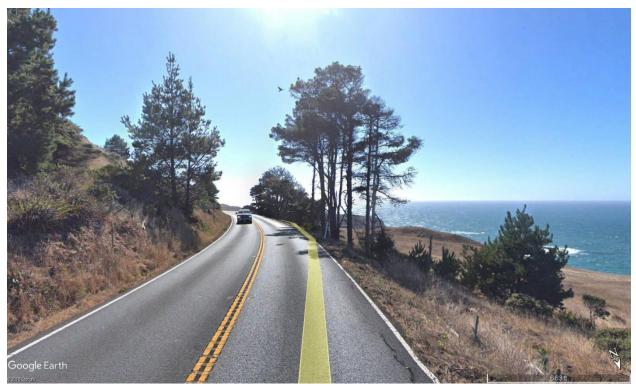


Figure 15 View looking southbound of trees to be removed adjacent to the roadway.



Figure 16 View looking northbound of trees to be removed adjacent to the roadway.

AVOIDANCE AND MINIMIZATION MEASURES

Avoidance or minimization measures have been identified and can lessen visual impacts caused by the project. Also, the inclusion of aesthetic features in the project design previously discussed can help generate public acceptance of a project. This section describes additional avoidance and/or minimization measures to address specific visual impacts. These will be designed and implemented with concurrence of the District Landscape Architect.

In addition to treating new MGS with a brown stain, the following measures to avoid or minimize visual impacts will be incorporated into the project:

- 1. For new cut slopes steeper than 2:1, roughen slope to help ensure the success of hydroseeding work. See Highway Design Manual 110.2(2)b & SSP 19-2.03G Roughen Soil
- 2. Minimize night work and construction working days to lesson temporary impacts during construction.

Memorandum

Making Conservation a California Way of Life

To: Jim Rasmussen, PE Chief, Design Branch M3 North Region – Office of Design Date:November 19, 2019File:01-MEN-001 PM 41.8/42.3EA:01-0C550EFIS ID:0112000300

Attn: Jon McKean

From: DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING SERVICES OFFICE OF GEOTECHNICAL DESIGN WEST- BRANCH F

Subject: Preliminary Geotechnical Recommendations for Navarro Ridge Safety Project

INTRODUCTION

This memorandum provides preliminary geotechnical recommendations for the proposed safety project on Highway 1 between approximately post mile 41.8 and 42.3 in Mendocino County. The project proposes various safety improvements, which include widening the existing lanes to 12 feet and widening the existing shoulders in both directions to 4 feet. This roadway widening requires fill slopes of up to approximately 15 feet in height and cut slopes of up to approximately 50 feet in height.

RECOMMENDATIONS

These geotechnical recommendations are based on a review of preliminary cross-sections provided by the Design Branch, discussions with the Design Branch, a review of available geologic literature and mapping, a few site visits, and laboratory testing of three grab samples.

For cut slopes, we recommend the following maximum cut slope inclinations:

Stationing	Recommended Maximum Cut Slope Inclination
0+00 to 7+50	1.25H:1V
7+50 to 14+00	1H:1V (flatten to 1.5H:1V, if Right-of-Way permits)
14+00 to 26+63.43	1.35H:1V to 1.5H:1V

Jim Rasmussen November 19, 2019 Page 2

For fill slopes, we recommend the following cut slope inclinations:

Stationing	Recommended Maximum Fill Slope Inclination
0+00 to 17+00	1.5H:1V
17+00 to 17+50	1.3H:1V
17+50 to 26+63.43	1.5H:1V

Portions of the proposed fill slopes will require geosynthetic reinforcement material. The location (vertical spacing, embedment, and lateral extent) and specifications for this material will be provided by this Branch at a later date.

If you have questions or require further assistance, please contact us at 707-445-7884 or 707-441-2024.

In not

Tägg Nordstrom, P.G. Engineering Geologist Office of Geotechnical Design West Branch F

Lianna Winkles-Prins

Lianna Winkler-Prins, P.E. Transportation Engineer Office of Geotechnical Design West Branch F

Cc:

Frank Demling, Project Manager Liza Walker, Senior Environmental Senior





CASE: CDP 2019-0024 OWNER: CALTRANS APN: N/A (Right-of-Way) APLCT: CALTRANS, Dist. 1 AGENT: Frank Demling ADDRESS: N/A, Albion

Public Roads

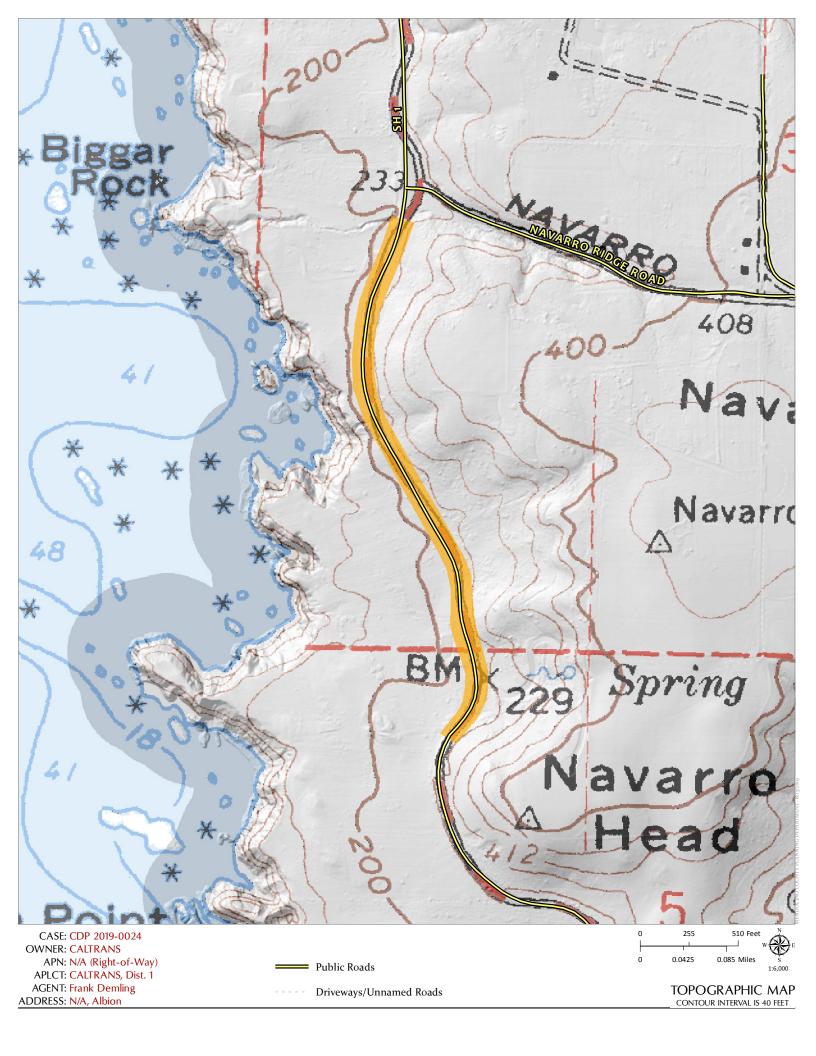
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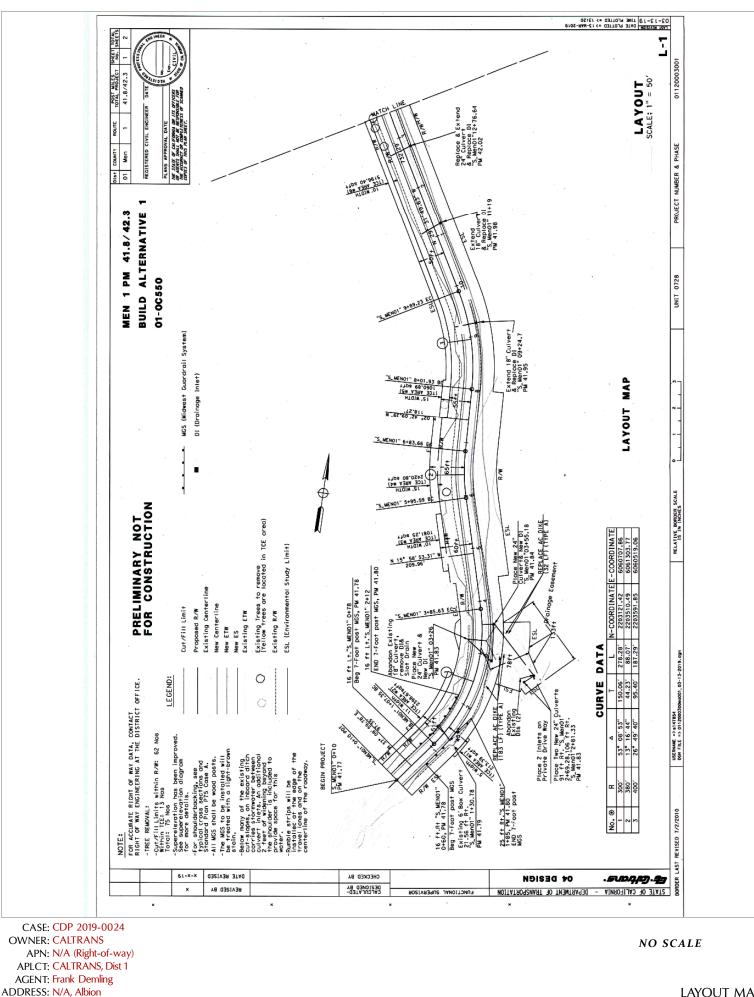
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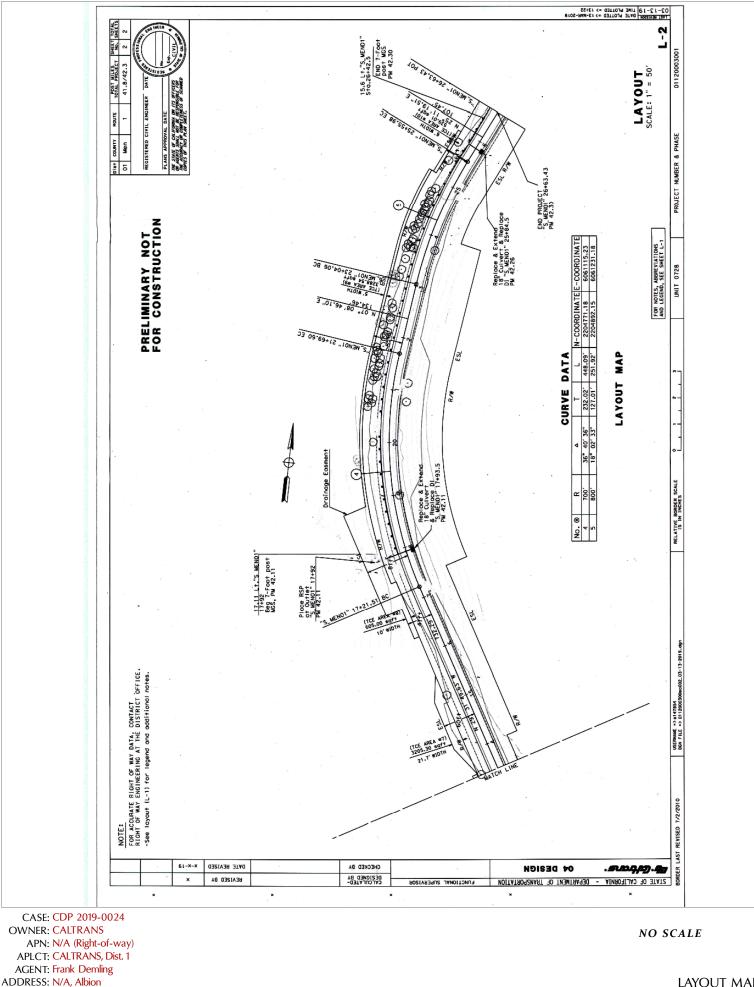
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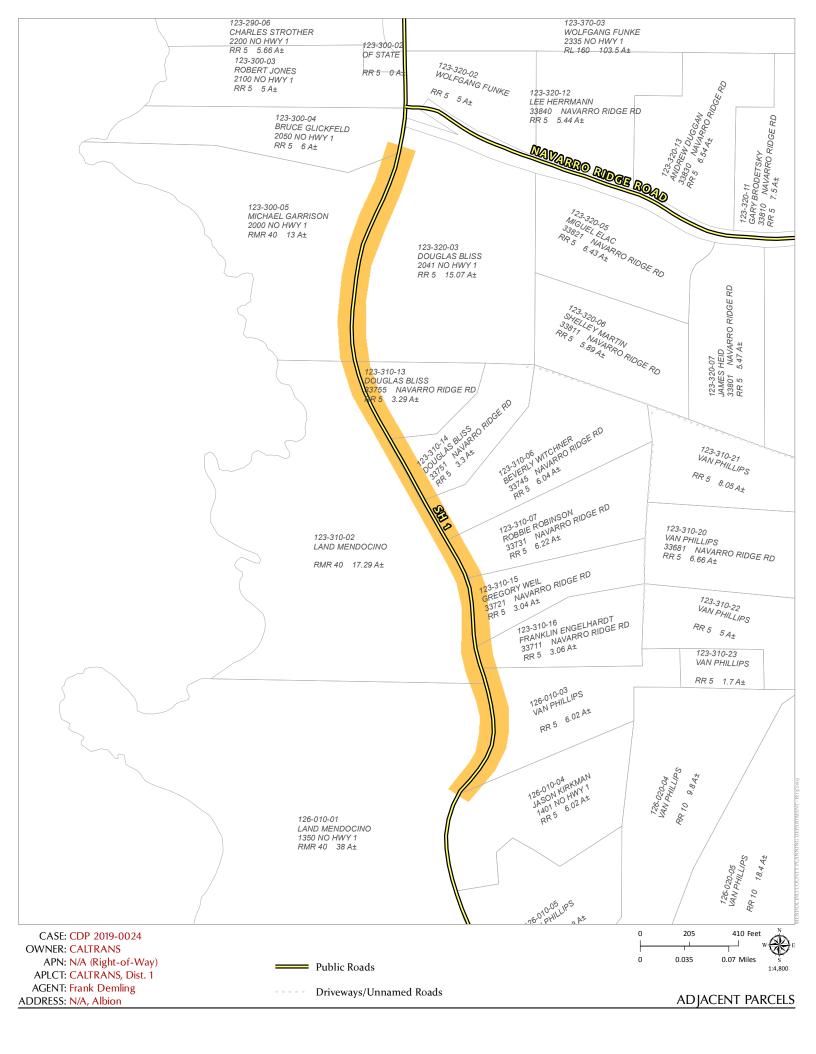


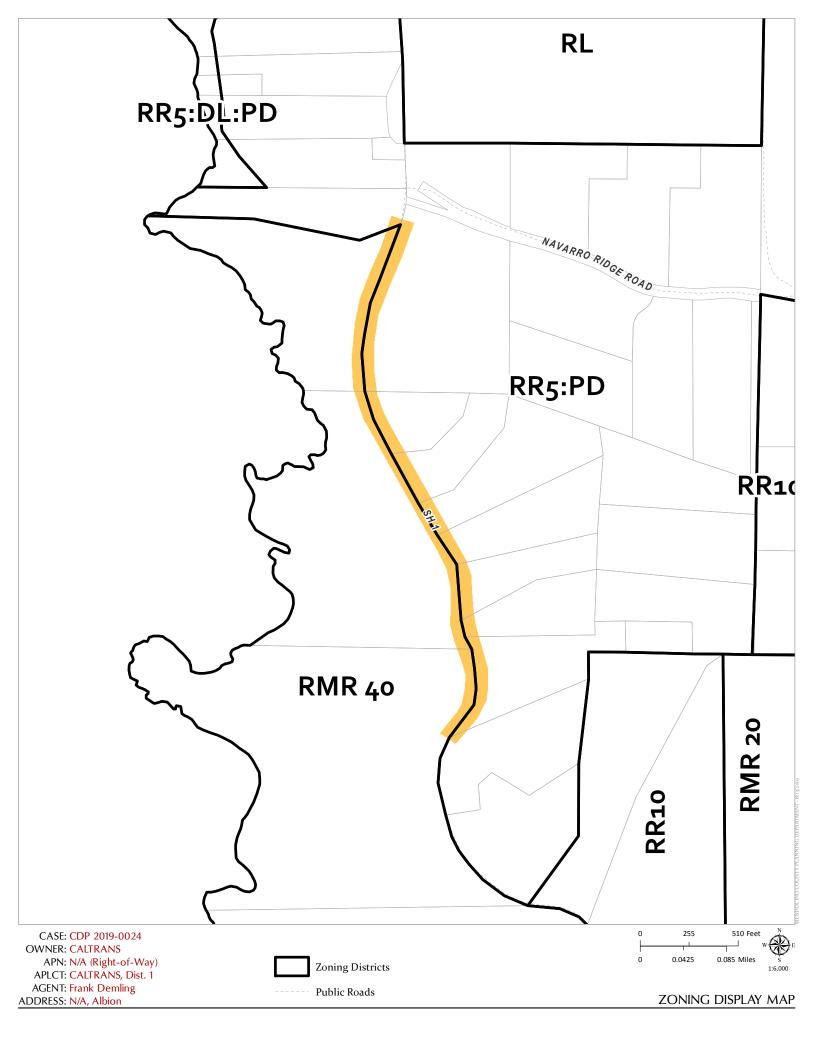


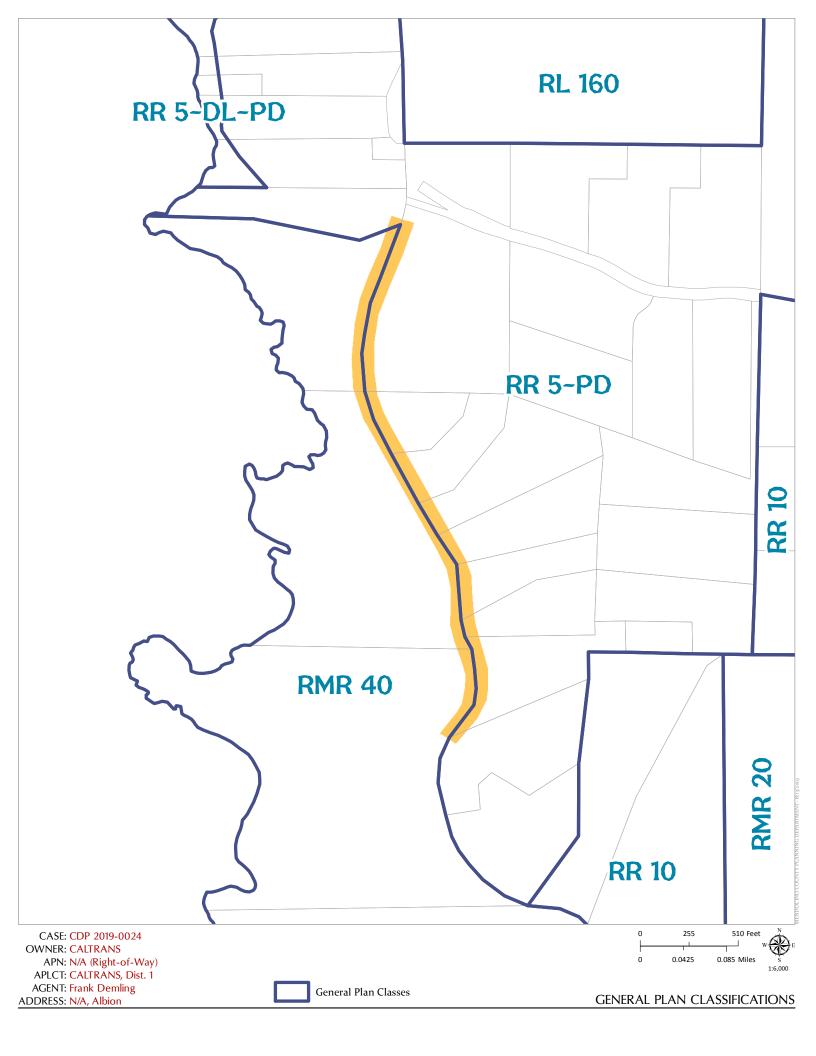
LAYOUT MAP 01

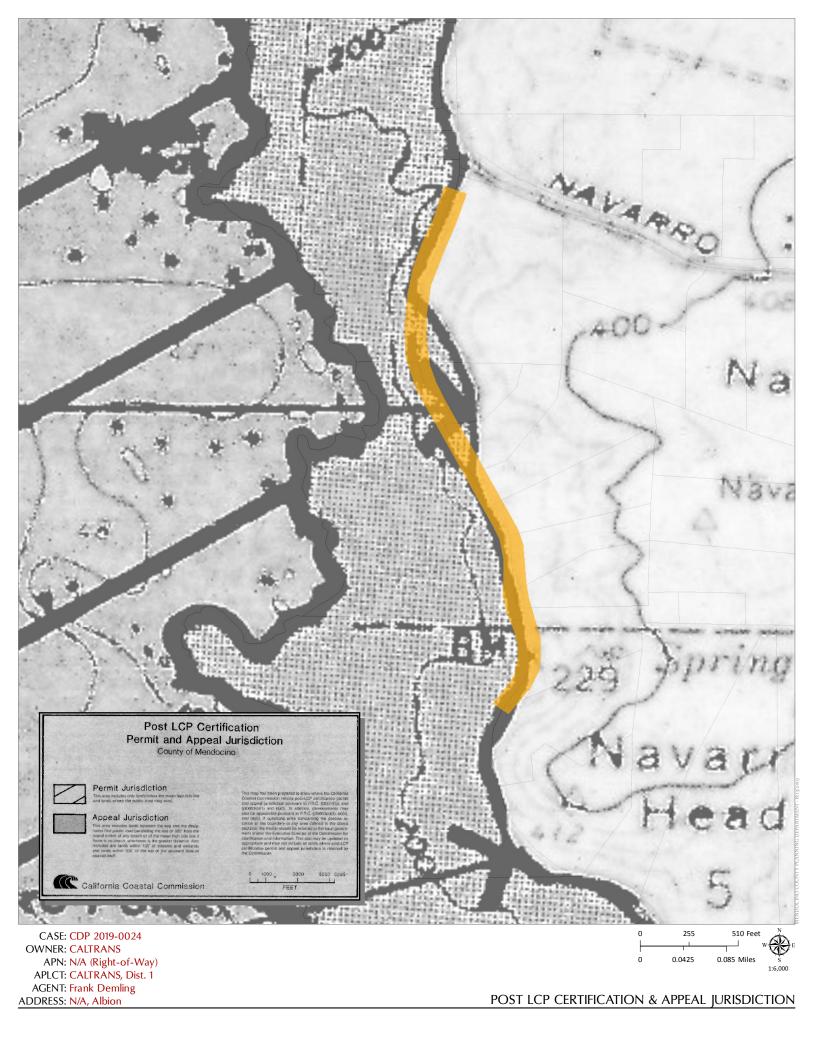


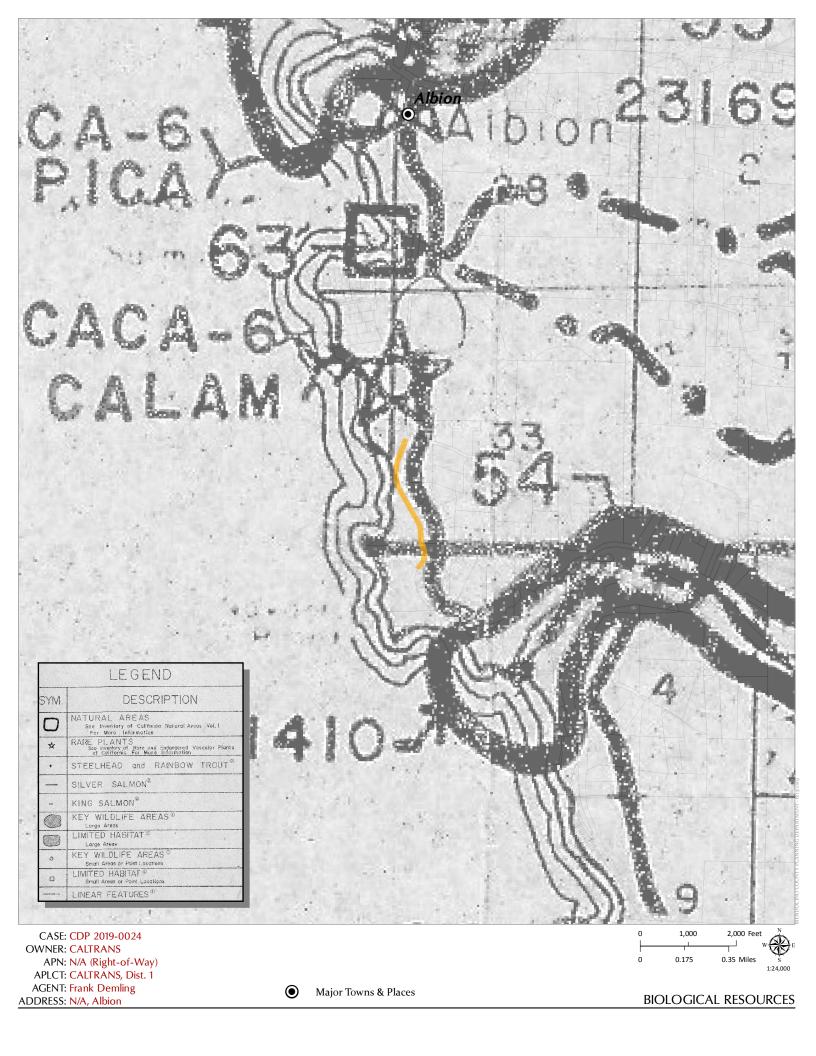
LAYOUT MAP 02

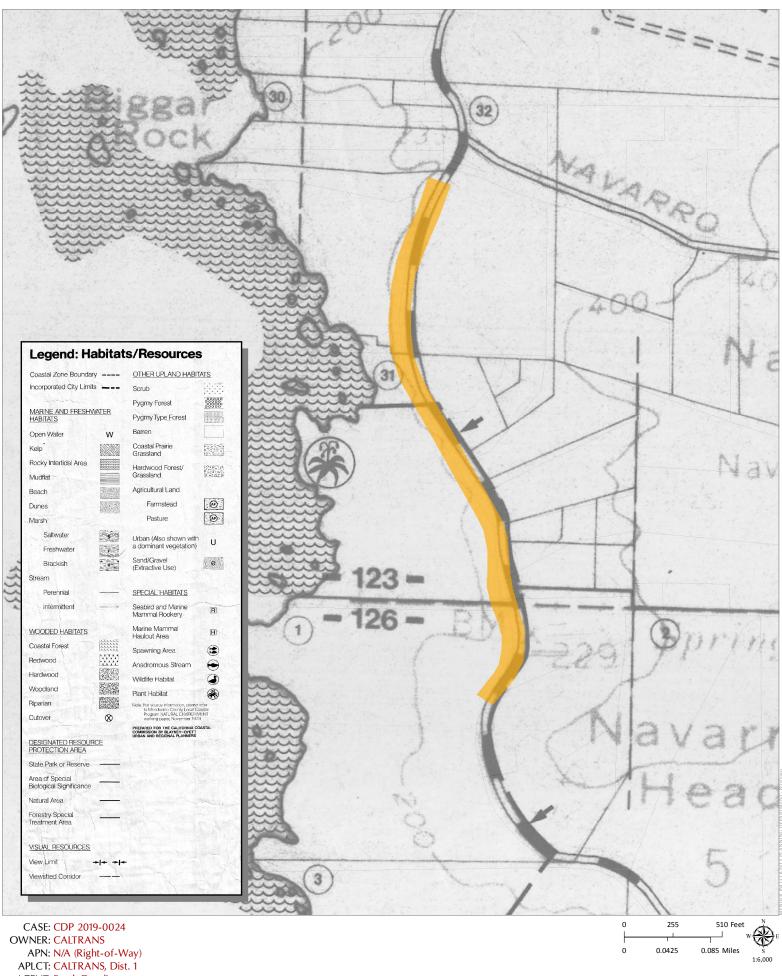






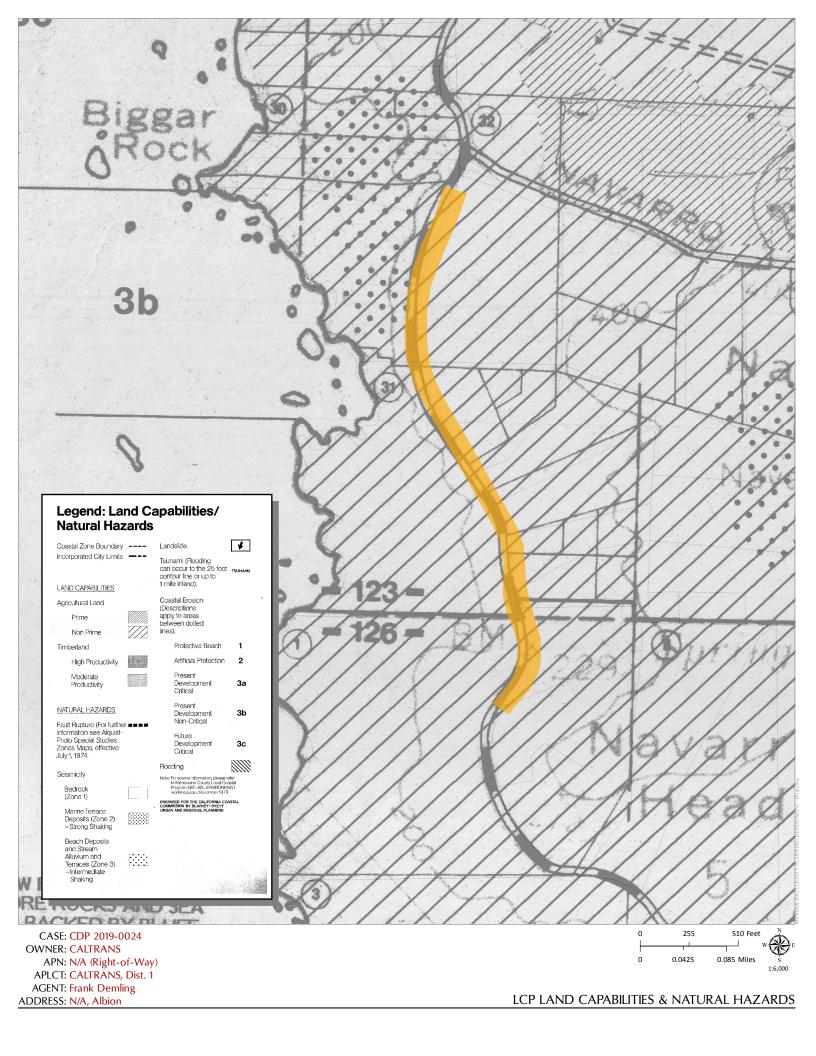


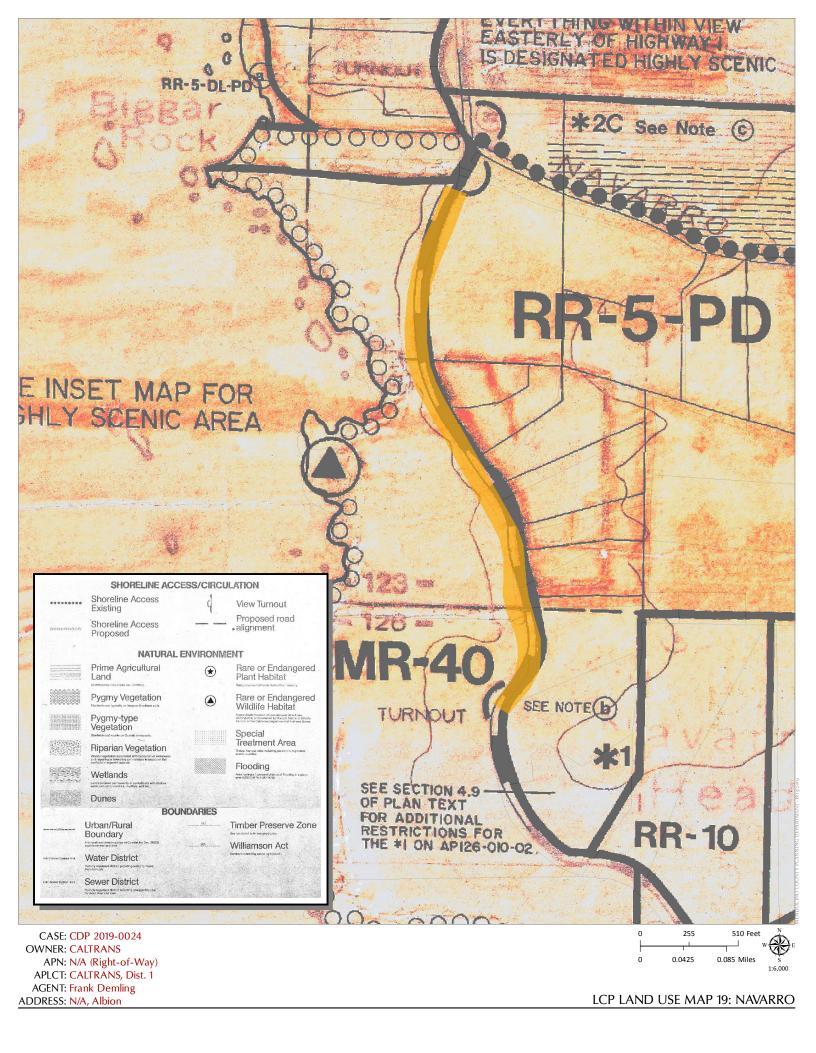


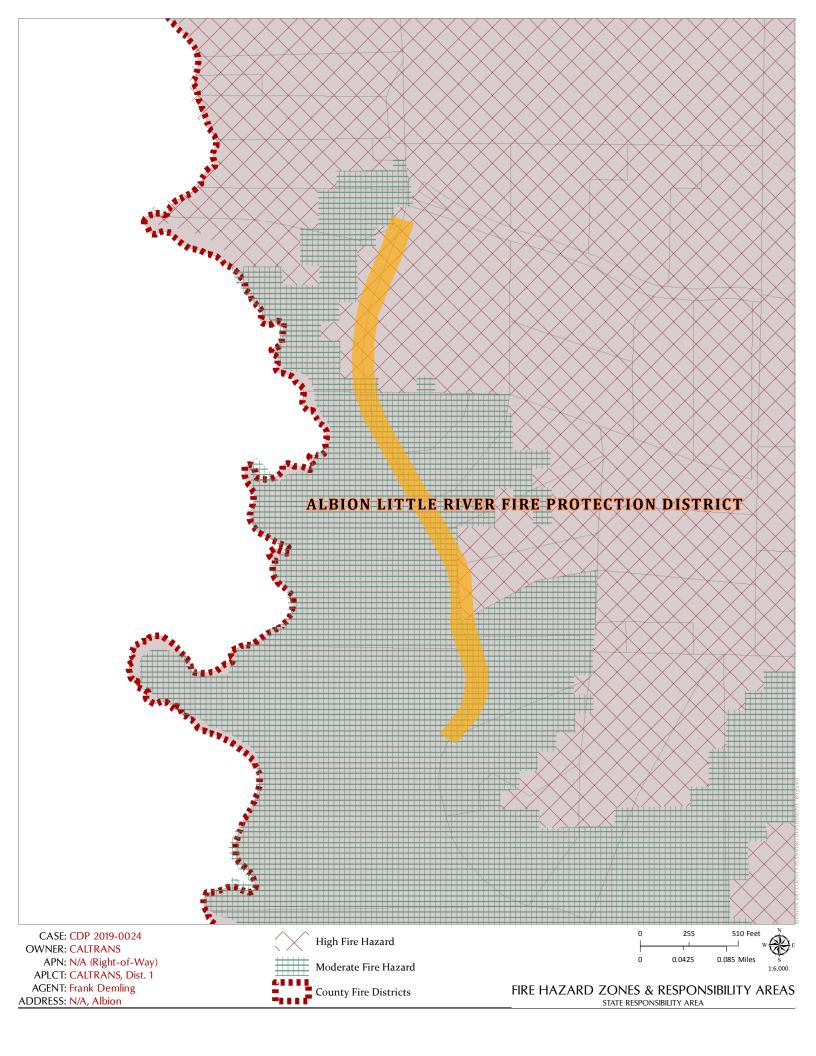


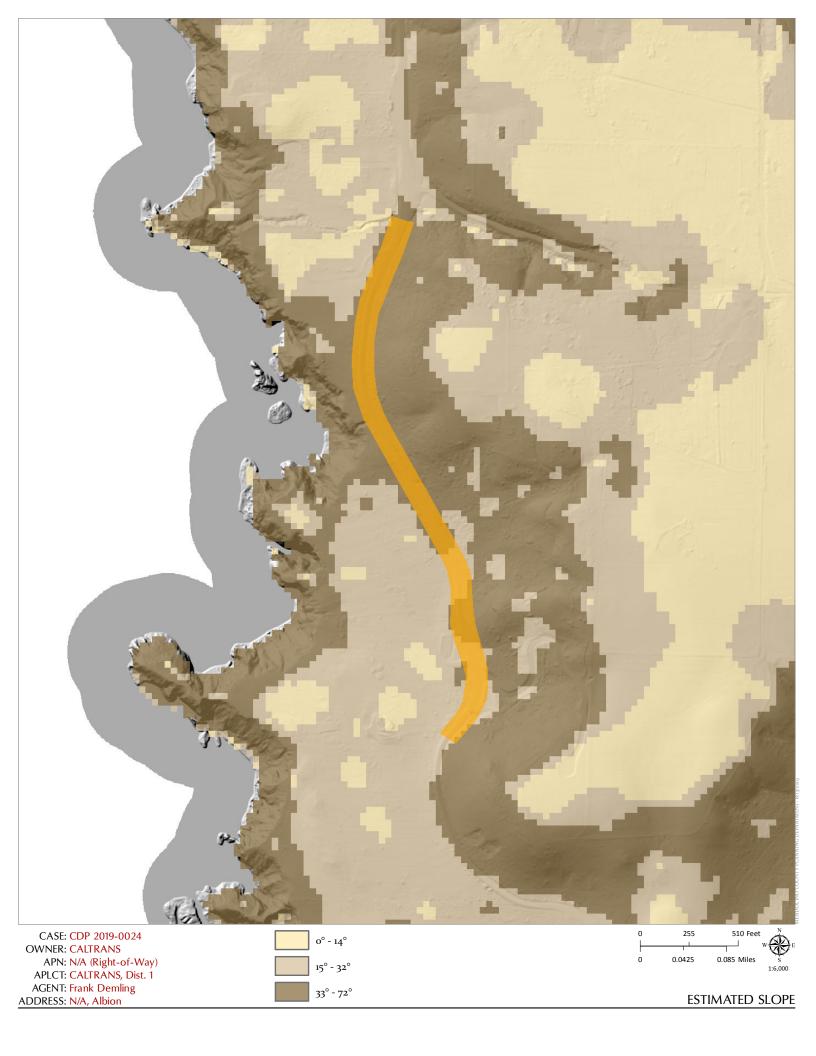
AGENT: Frank Demling ADDRESS: N/A, Albion

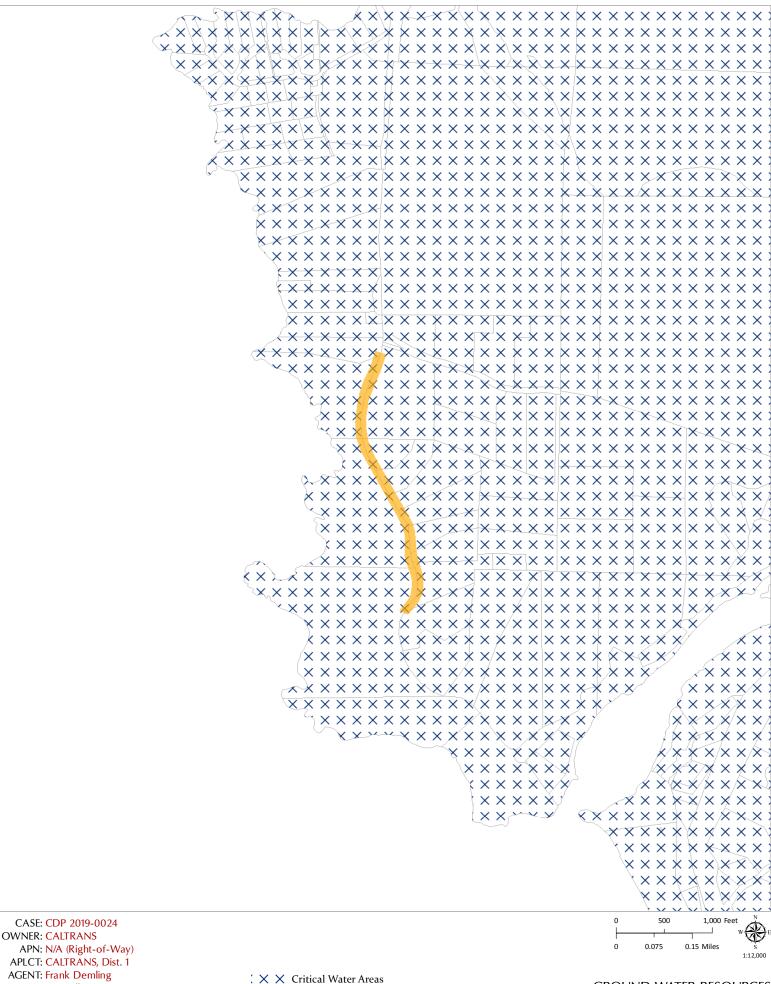
LCP HABITATS & RESOURCES











ADDRESS: N/A, Albion

GROUND WATER RESOURCES

