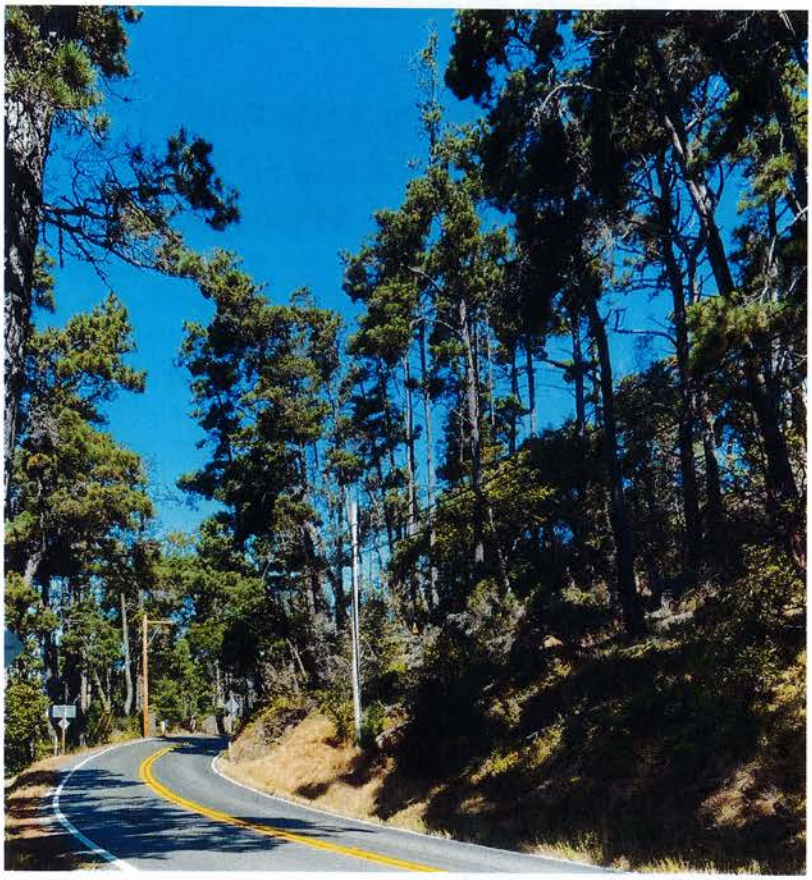
Appendix G

On-Site Revegetation Plan (1/13/2023)

ONSITE REVEGETATION PLAN

for the

Gualala Shoulders Project



Mendocino County, State Route 1
Post Miles 6.5 to 6.8 and 9.3 to 9.5
EA 01-0F710 / EFIS 0116000047
January 2023

Caltrans

STATE OF CALIFORNIA

Department of Transportation

ONSITE REVEGETATION PLAN

for the

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Mendocino County, State Route 1
Post Miles 6.5 to 6.8 and 9.3 to 9.5
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STATE OF CALIFORNIA
Department of Transportation
District 01

Prepared by: _____ Date: January 12, 2023
Loriel Caverly, Revegetation Specialist
North Region Environmental – Revegetation North

Peer Reviewed by: Christina Wagner Date: January 12, 2023
Christina Wagner, Revegetation Specialist
North Region Environmental – Revegetation North

Approved by: Mikayla Loucks Date: 1/13/2023
Mikayla Loucks, Senior Environmental Planner
North Region Environmental – Revegetation North

1) Applicant and Contacts

a) Permit applicant, owner of revegetation site, and party with financial responsibility for completing revegetation work:

i. California Department of Transportation (Caltrans)

b) Permitting agencies requiring revegetation:

i. California Department of Fish and Wildlife (CDFW)

ii. Mendocino County Planning and Building Services (Mendocino County)

iii. North Coast Regional Water Quality Control Board (NCRWQCB)

iv. United States (U.S.) Army Corps of Engineers (USACE)

c) Contacts:

i. ***Revegetation Specialist:*** Loriel Caverly
1656 Union Street, Eureka, CA 95501 (707) 492-0118

ii. ***Senior Environmental Planner, Revegetation North:*** Mikayla Loucks
1031 Butte St., MS 30, Redding, CA 96002 (530) 759-3408

iii. ***Project Biologist:*** Christopher Hart
1656 Union Street, Eureka, CA 95501 (707) 382-7561

iv. ***Project Manager:*** Caren Coonrod
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2) Project Location

The California Department of Transportation proposes to realign curves and widen the shoulders on State Route 1 (SR 1) in Mendocino County from post miles (PMs) 6.5 to 6.8 and PMs 9.3 to 9.5 under the efforts of the Gualala Shoulders Project (hereinafter the project). (Figure 1).


Point Arena
EUREKA HILL
2368 ft
477 ft
Location 2
Location 1
TRIPLETT GULCH
HAVENS NECK
Fish Rock
Havens Anchorage
Gualala
0 0.5 1 2 Miles
California
Mendocino
N
Gualala Shoulders Project
01-0F710 001-MEN-1 PM 6.4/9.2
Caltrans

3) Construction Activities and Anticipated Impacts

a) Construction Activities

Work proposed for this project is proposed in two locations on SR 1 north of Gualala in Mendocino County and would include realigning the roadway, widening the shoulders, installing guardrail and supporting retaining walls, replacing and extending culverts, placing rock-slope-protection (RSP) next to culverts, and relocating utility poles.

b) Anticipated Impacts

Temporary impacts are those in which restoration begins within one year of the first date of impact. Temporal impacts occur when restoration begins more than one year after the first date of impact and there is a temporal loss of function. Permanent impacts are impacts that are not restorable.[1]

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[1] Due to the anticipated time involved in restoring habitat types, most impacts here are treated as permanent impacts for the purposes of permitting and mitigation.

The California Coastal Commission uses the following resource impact type definitions for the purposes of the Mendocino County permit application:

1. Temporary:
    a. No significant ground disturbance or killing of native vegetation
    b. Vegetation and habitat function recovers to comparable age/size class within 12 months of initial disturbance.
2. Long-Term Temporary:
    a. Impact occurs over no more than 24 months.
    b. Vegetation recovers to comparable age/size class no more than 12 months following the *conclusion* of disturbance.
3. Permanent: All other impacts not covered above

The proposed project would result in approximately 0.87 acre of permanent impacts and 0.06 acre of combined temporal and temporary impacts to Environmentally Sensitive Habitat Areas (ESHAs), Sensitive Natural Communities (SNCs), and Waters of the U.S. and State under the jurisdiction of CDFW, Mendocino County's Local Coastal Plan in coordination with the California Coastal Commission (CCC), NCRWCB, and USACE. Impacts would result from the following construction activities:

i. Cut and fill of existing side slopes

ii. Guardrail installation

iii. Down-drain replacement and culvert extensions

iv. Construction of minor retaining walls

v. Temporary stream diversions

Table 1 below summarizes the estimated net impacts and Figure 2 shows the proposed impacts and respective habitat types.

Table 1. Estimated net impacts and offsets to ESHAs, SNCs, aquatic resources, and riparian areas associated with the project

Feature Type	Temporary (Acres)	Temporal[2] (Acres)	Permanent (Acres)	Total Impacts (Acres)	Mitigation Ratio	Required Mitigation (Acres)	Onsite Offsets via Revegetation (Acres)	Remaining Impacts in Need of Mitigation (Acres)
Three-parameter Wetland ESHA	0	0.0498	0.0552	0.1050	4:1	0.4198	0.0097	0.4102
Relatively Permanent Waters ESHA	0	0	0.0022	0.0022		0.0088	0	0.0088
Potentially State Jurisdictional Ephemeral Ditch	0.0021	0	0	0.0021	1:1	0.0021	0	0.0021
Total Aquatic Impact	0.0021	0.0498	0.0574	0.1093		0.4307	0.0097	0.4211
Coniferous Riparian ESHA	0	0	0.0109	0.0109	3:1	0.0328	0.0125	0.0203
Pacific Reed Grass Meadow ESHA/SNC	0	0.0031	0.0050	0.0081		0.0243	0.0258	-0.0015
Bishop Pine Forest ESHA/SNC	0	0	0.7959	0.7959		2.3878	0.0821	2.3057
Total Upland Impact	0	0.0031	0.8119	0.8150		2.4449	0.1204	2.3245
TOTAL IMPACTS	**0.0021**	**0.0529**	**0.8693**	**0.9242**		**2.8756**	**0.1301**	**2.7456**

[2] Due to the anticipated time involved in restoring these habitat types, temporal impacts here are treated as permanent impacts for the purposes of permitting and mitigation.

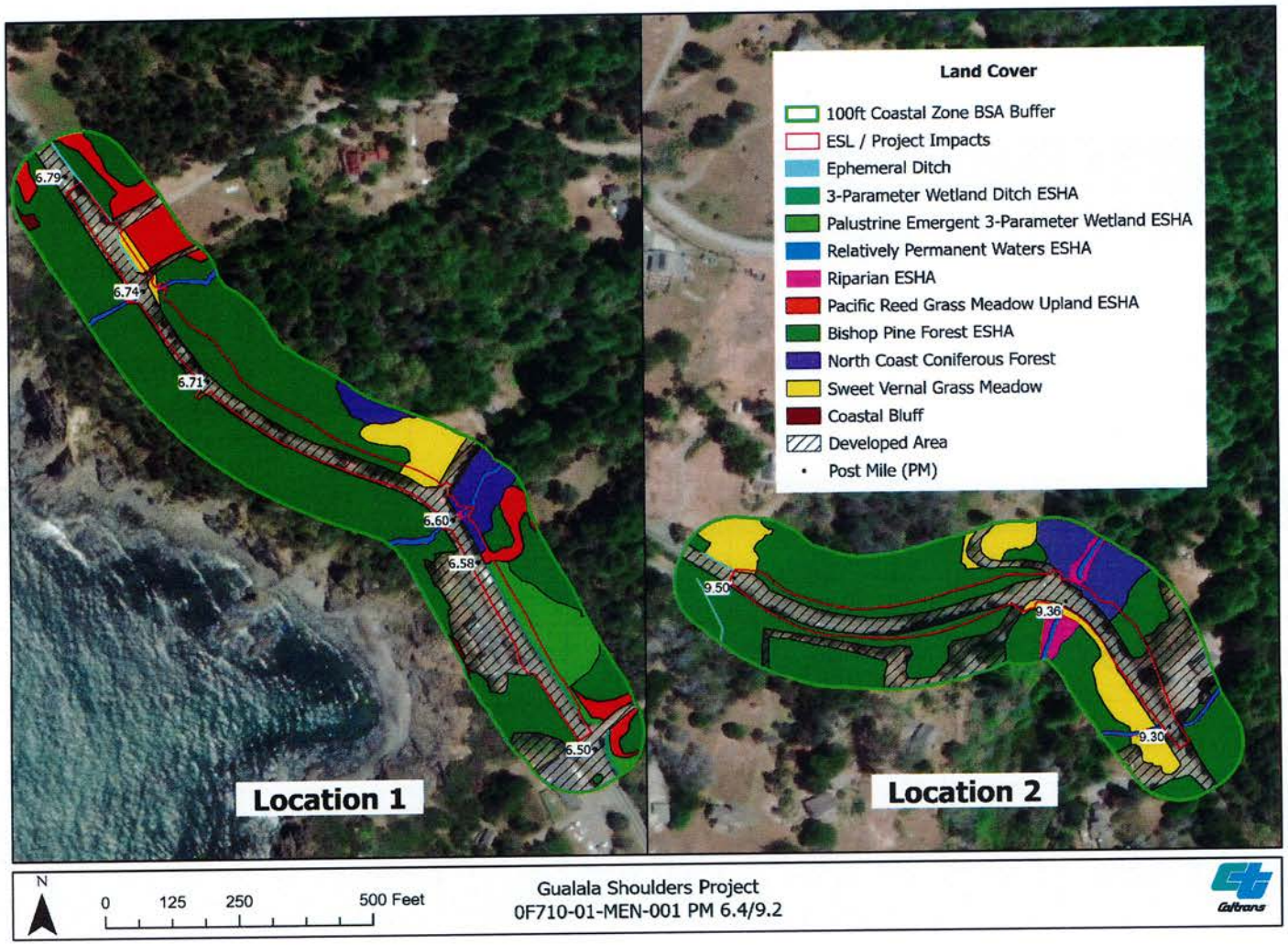

Figure 2: Habitat types in the ESL would be temporarily or permanently impacted by project activities.

4) Revegetation Goals

The project limits include a total of approximately 0.7 mile along SR 1 in two separate locations. The impacts and onsite restoration of those impacts will occur in multiple locations including in culverts and upland areas. Both on-site revegetation and off-site mitigation would be used to adequately mitigate for project impacts (Table 1). All project impacts not offset by onsite revegetation would be mitigated by offsite mitigation. Offsite mitigation would be addressed in an Offsite Mitigation Plan.

a) The revegetation goals include:

i) Initiate restoration of temporal loss of function-affected vegetation communities in areas with safe parking and access for maintenance crews, by replanting with self-sustaining native plants appropriate to the region and habitat. Due to limited right-of-way and potential lack of parking at both locations, onsite revegetation may not be feasible in all impacted areas. The following vegetation communities have been identified on site and would be replanted where safe access makes on-site revegetation feasible:

(1) Coastal terrace prairie (*Calamagrostis nutkaensis* meadow)

(2) Palustrine emergent 3-parameter wetland

(3) Riparian habitats associated with ephemeral drainages and streams

(4) Bishop pine (*Pinus muricata*) forest

(a) Would be replaced with associated conifer and understory shrub and herbaceous species if adequate space is available since Caltrans is prohibited from planting bishop pine in the right-of-way.

ii) Prevent establishment of newly introduced invasive plant species ranked as having "High" or "Moderate" ecological impact by the California Invasive Plant Council (Cal-IPC), except for non-native annual grasses, in the areas disturbed by construction activities that are safely accessible by foot. Pre-construction surveys would be completed to establish which Cal-IPC rated High and Moderate species are present before construction.

b) Bishop pine discussion: In order to protect the safety of the traveling public, Caltrans' policy prohibits the roadside planting of bishop pine within coastal Mendocino County due to the prevalence of bishop pine decline which is caused by a suite of pathogens. The primary problematic pathogens are *Ips* species, a group of tiny engraver beetles; a canker

causing fungus, pine pitch canker (*Fusarium circinatum*); and a water mold which causes root rot dieback (*Phytophthora cinnamomi*). Bishop pine decline is already prevalent in the stands of bishop pine within the area of project impacts, and some of the mature bishop pine individuals within the adjacent right-of-way are in poor health or dead. Due to this prohibition, Caltrans and CDFW have agreed to planting associated conifer species in the impacted bishop pine ESHA/SNC, such as Douglas fir (*Pseudotsuga menziesii* var. *menziesii*) and grand fir (*Abies grandis*) where feasible. Where planting trees is not feasible due to limited space, planting of associated shrubs and herbaceous species would be implemented.

5) Summary of Revegetation Activities and Planting Locations

Revegetation activities will include:

a) Erosion Control

Upon completion of construction, a permanent erosion control seed mix using regionally appropriate native species and a non-persistent annual grass (e.g., common barley, *Hordeum vulgare*) will be hydroseeded in all areas of ground disturbance with bare soil. Erosion control measures are specifications managed by Construction and Landscape Architecture and by Maintenance after completion of construction. These measures are not considered part of the revegetation success criteria.

b) Plant Species and Quantities

Revegetation will be conducted using California native, regionally- and habitat-appropriate plant species. Plant material may include locally collected and outgrown bareroot stock, container stock, and salvaged material. The anticipated species of plant material to be utilized are presented in Tables 2 through 7 with species and quantities intended to closely resemble native plants currently present in each habitat. Installed container plants or cuttings will be regionally appropriate and sourced from Mendocino or Sonoma counties, within five miles of the coast.

In addition, natural vegetation recruitment (volunteers) and resprouting native vegetation will be incorporated into planting considerations and revegetation goals and may contribute to achieving the success criteria. Actual species and quantities to be used for initial planting and replanting will be determined by commercial availability, natural recruitment, resprouting vegetation, site conditions at the time of planning and planting, and other factors. If vegetation is cut at ground level prior to construction, then

resprouting vegetation will be protected from herbivory, if needed, and monitored for continued survival and re-establishment.

c) Proposed Planting Areas

The proposed planting areas shown in Figures 3 through 7 will occur within the Caltrans right-of-way. To account for safety and maintenance, tree planting will occur outside of the "clear recovery zone"—which is a required site specific, tree-planting setback from the white fog line on the traveled road surface. The Revegetation Specialist will confirm setback distance with Traffic Safety before planting trees. The exact location for installing each plant within revegetation areas will be determined at the time of planting by a Caltrans Revegetation Specialist. The total planting areas will encompass approximately 5,666 square feet (0.1301 acres). The two temporary/temporally impacted bishop pine forest areas each consist of a long thin strip of vegetation removal, which would be about 3 feet wide. Both would be situated at the top of a cut slope. It may not be feasible to install tree species in this space, but if there is the opportunity based on healthy spacing from other trees, then Caltrans would plant trees. The most likely outcome based on the construction plans would be to install shrubs and herbaceous species associated with the Bishop Pine Forest Alliance.

i) ***Revegetation (Reveg) Area 1:*** At the very south end of the project, at Location 1, on the northbound (NB) side of the road, starting from post mile (PM) 6.50 and heading north to approximately PM 6.60, there would be approximately 421 square feet (0.0097 acre) of temporal impact beyond the cut line, with minimal soil disturbance. This area includes a Pacific reed grass meadow ESHA/SNC and a 3-parameter emergent palustrine wetland. Temporal impacts on this shoulder will be revegetated with a mix of species which were selected based on the native plants currently growing in this area. Table 2 contains the planting palette, which is a list of species to be planted depending on availability and space. Figure 3 shows the potential revegetation area.

Table 2. Potential planting palette for Reveg Area 1, Pacific reed grass meadow and 3-parameter emergent palustrine wetland, PM 6.50 to PM 6.60

Scientific Name	**Common Name**	**Quantity needed for initial planting**	**Planting Densities**
Shrubs			
Baccharis pilularis ssp. *consanguinea*	coyote brush	To be determined	6 to 8 feet on center
Gaultheria shallon	salal		
Frangula californica ssp. *californica*	California coffeeberry		
Lonicera hispidula	pink honeysuckle		
Morella californica	California wax myrtle		
Rubus ursinus	California blackberry		
Vaccinium ovatum	evergreen huckleberry		
Herbs, Ferns, Grasses			
Calamagrostis nutkaensis	Pacific reed grass	To be determined	3 to 4 feet on center
Iris douglasiana	Douglas iris		
Polystichum munitum	sword fern		
Pteridium aquilinum var. *pubescens*	Western bracken fern		
Scrophularia californica	California bee plant		

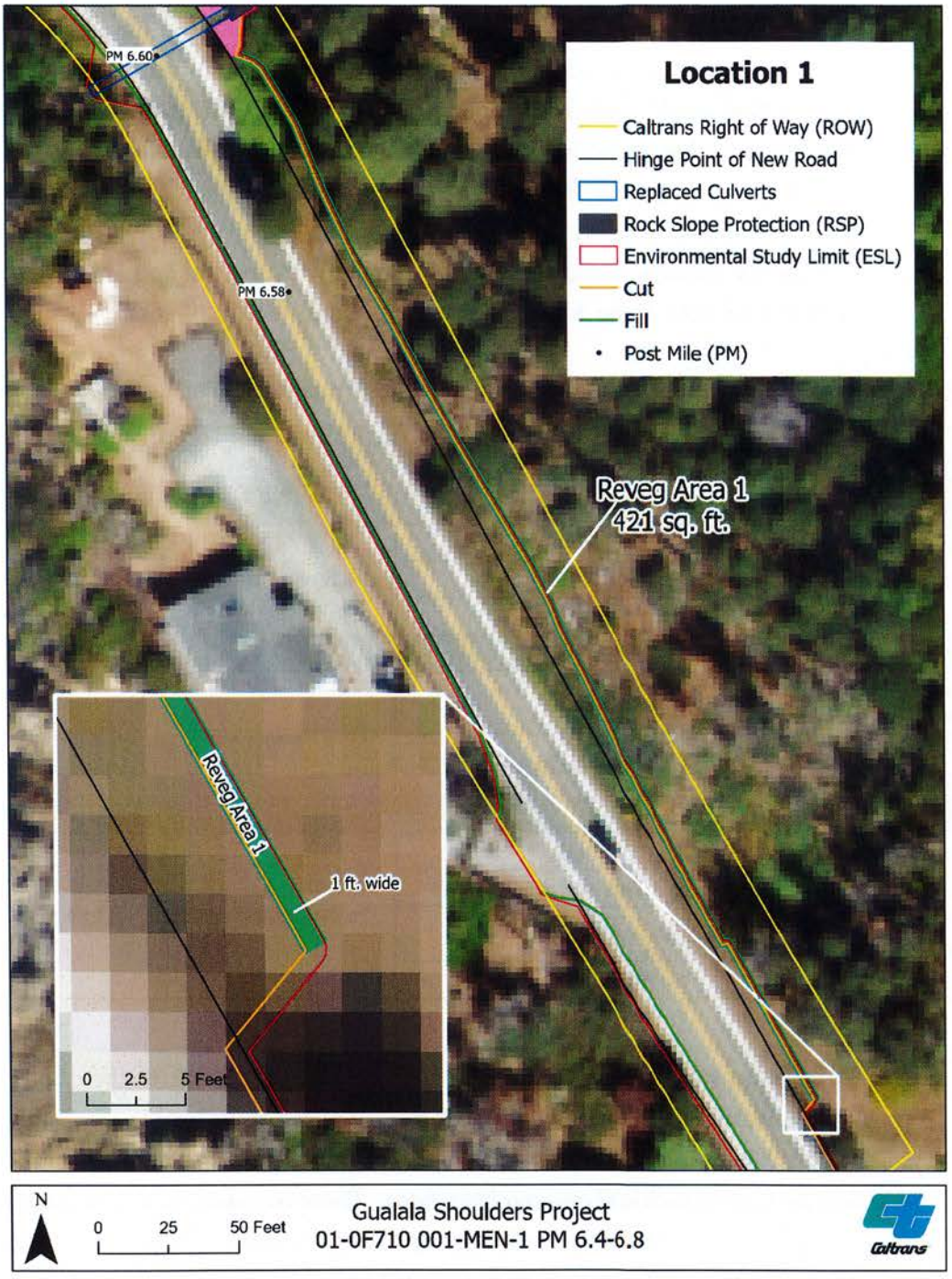

Figure 3: Map of Reveg Area 1 from PM 6.5 to 6.6

ii) ***Reveg Areas 2 and 3:*** The culvert inlet and associated coniferous riparian area at PM 6.60 (Reveg Area 2) would have approximately 284 square feet (0.0065 acre) of combined temporal and permanent impacts. The anticipated final layout after construction would result in the opportunity to restore 326 square feet (0.0075 acre) of riparian habitat on the NB side of SR 1. Much of this area would be subjected to the tree-planting setback for traffic safety and would be planted with shrubs and herbs. Immediately north of the culvert, approximately 32 square feet (0.0007 acre) of temporal impacts would occur (Reveg Area 3). Both areas would be revegetated with species from Table 3 and are shown in Figure 4.

Table 3. Potential planting palette for Reveg Area 2 and 3, riparian habitat at PM 6.60 culvert.

Scientific Name	**Common Name**	**Quantity needed for initial planting**	**Planting Densities**
Trees			
Salix sitchensis	Sitka willow	To be determined	8 to 12 feet on center
Pseudotsuga menziesii	Douglas fir		
Sequoia sempervirens	Coast redwood		
Shrubs			
Baccharis pilularis ssp. *consanguinea*	coyote brush	To be determined	6 to 8 feet on center
Frangula californica ssp. *californica*	California coffeeberry		
Herbs and Ferns			
Carex obnupta	slough sedge	To be determined	3 to 4 feet on center
Oxalis oregana	redwood sorrel		
Petasites frigida var. *palmatus*	western coltsfoot		
Polystichum munitum	sword fern		

iii) ***Reveg Area 4:*** Just north of the driveway and culvert at PM 6.60, there is approximately 1,124 square feet (0.0258 acre) of ruderal habitat in the Caltrans ROW. Mixed in with the non-native grasses are patches of strawberry (*Fragaria* sp.) and pink honeysuckle (*Lonicera hispidula*). These two species will be preserved to the greatest extent feasible while making room for Pacific reed grass by clearing non-native grasses. With 353 square feet (0.0081 acre) of impacts to this ESHA/SNC, at a 3:1 ratio, impacts to this habitat would require 1,059 square feet (0.0243 acre) of mitigation which will be fully offset by the creation of this Pacific reed grass

meadow. Pacific reed grass will be planted approximately 3 feet on center within this area which results in approximately 125 plants. The area is shown in Figure 4.

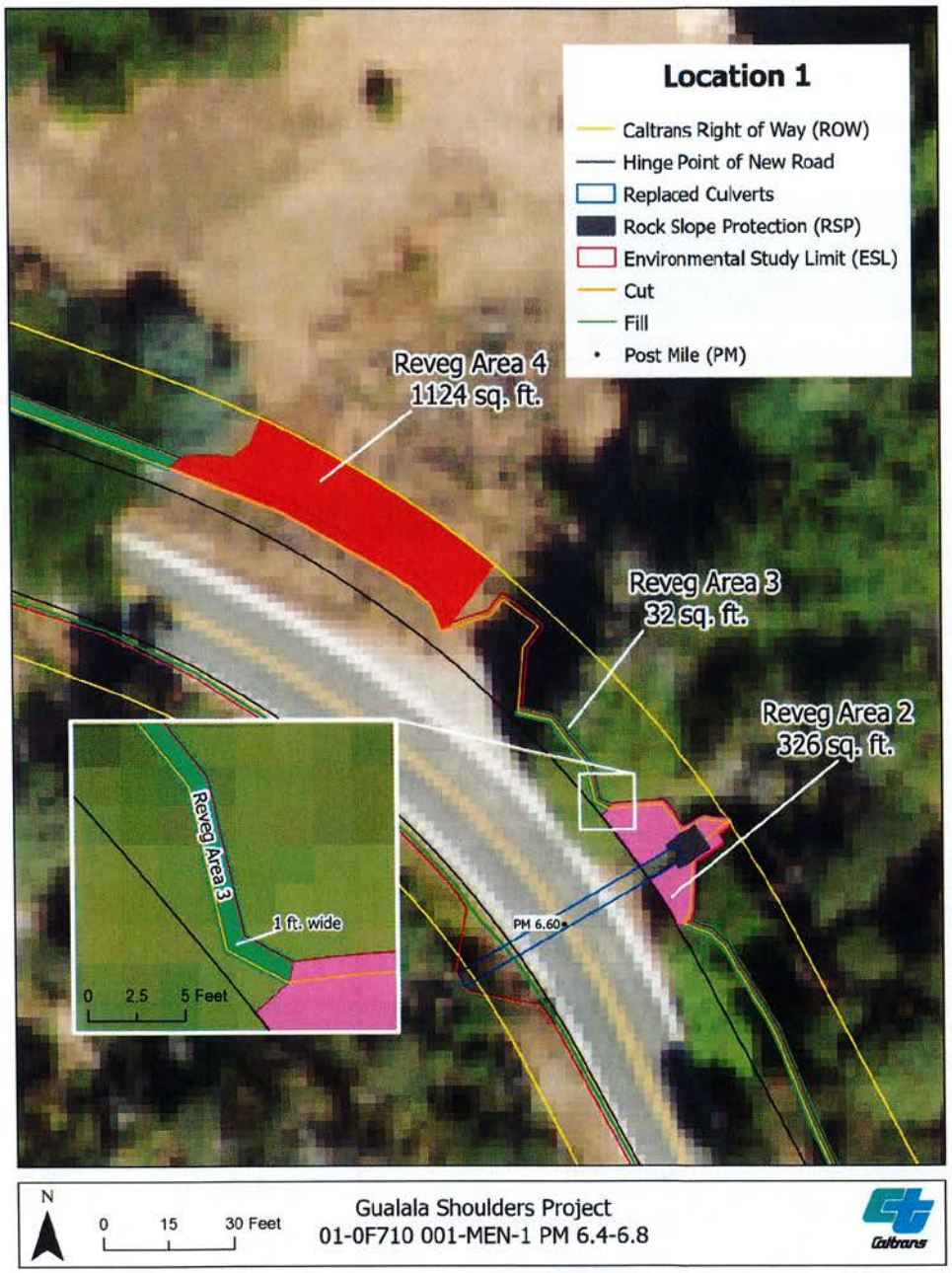

Figure 4: Map of Reveg Areas 2, 3, and 4 including coniferous riparian and Pacific reed grass meadow habitats.

iv) ***Reveg Area 5:*** Beginning just north of Reveg Area 4 and ending at PM 6.74, the upland bishop pine ESHA/SNC area would have approximately 1,714 square feet (0.0393 acre) of temporal impacts. If it is feasible and safe to work in this area, it will be revegetated using species from the planting palette in Table 4 and is shown in Figure 5.

Table 4. Potential planting palette for Reveg Area 5, upland bishop pine ESHA/SNC habitat from PM 6.60 to 6.74.

Scientific Name	**Common Name**	**Quantity needed for initial planting**	**Planting Densities**
Trees			
Abies grandis	grand fir	To be determined	8 to 12 feet on center
Arbutus menziesii	madrone		
Notholithocarpus densiflorus	tan oak		
Pseudotsuga menziesii var. *menziesii*	Douglas-fir		
Shrubs			
Arctostaphylos columbiana	hairy manzanita	To be determined	6 to 8 feet on center
Arctostaphylos X media	hybrid manzanita		
Baccharis pilularis ssp. *consanguinea*	coyote brush		
Diplacus aurantiacus	sticky monkeyflower		
Gaultheria shallon	salal		
Frangula californica ssp. *californica*	California coffeeberry		
Lonicera hispidula	pink honeysuckle		
Morella californica	California wax myrtle		
Rubus parviflorus	thimbleberry		
Rubus ursinus	California blackberry		
Vaccinium ovatum	evergreen huckleberry		
Herbs and Ferns			
Angelica hendersonii	coast angelica	To be determined	3 to 4 feet on center
Calamagrostis nutkaensis	Pacific reed grass		
Elymus glaucus	blue wild rye		
Polystichum munitum	sword fern		
Pteridium aquilinum var. *pubescens*	Western bracken fern		
Solidago spathulata	coast golden rod		
Viola sempervirens	redwood violet		

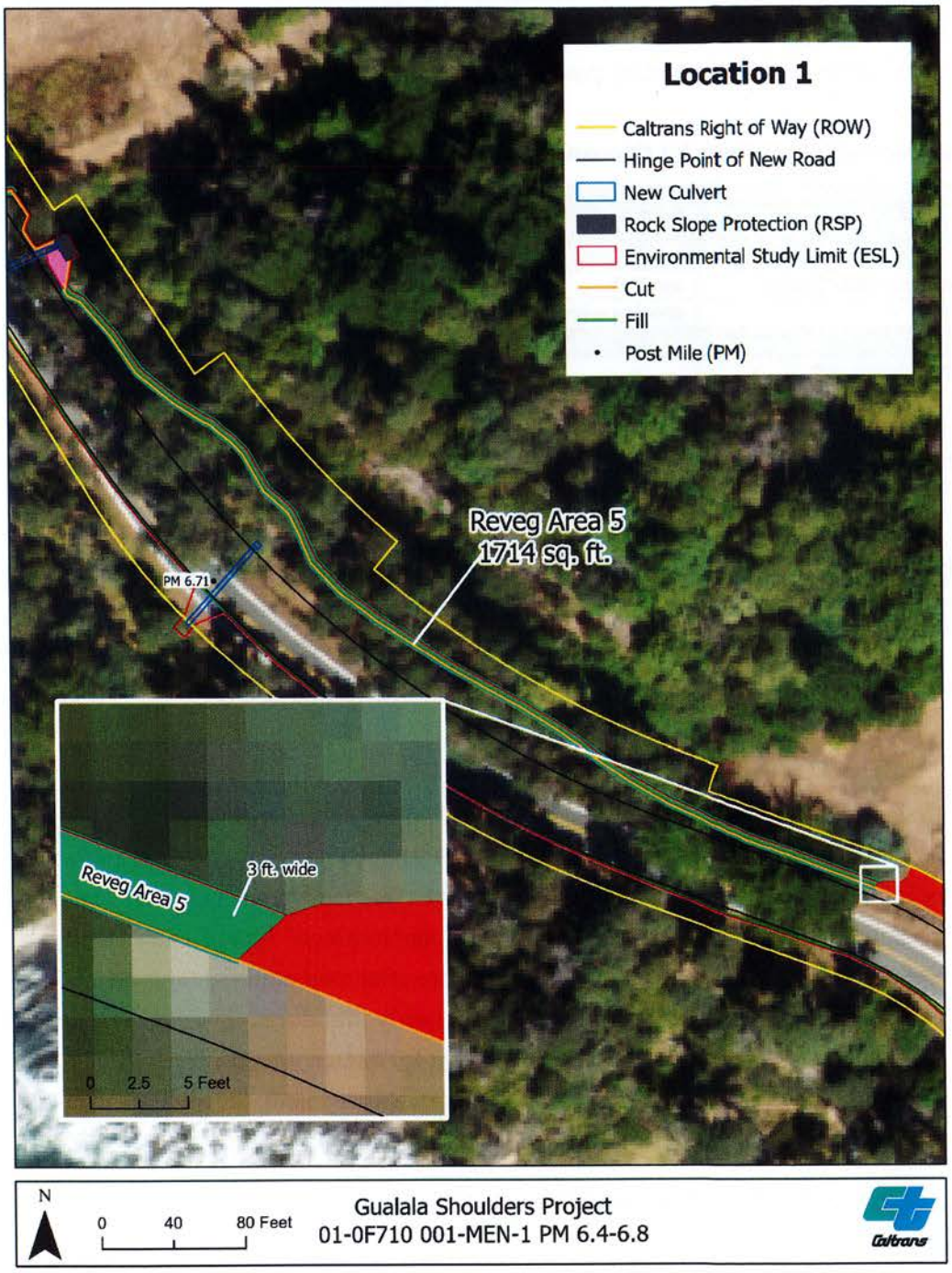

Figure 5. Map of Reveg Area 5, upland bishop pine ESHA/SNC, from PM 6.60 to PM 6.74

v) ***Reveg Area 6:*** The culvert and associated riparian habitat at PM 6.74 would have temporal impacts up to 218 square feet (0.0050 acre). This area will be replanted with species from the planting palette in Table 6 and is shown in Figure 6.

Table 5. Potential planting palette for riparian habitat at culvert PM 6.74.

Scientific Name	**Common Name**	**Quantity needed for initial planting**	**Planting Densities**
Trees			
Notholithocarpus densiflorus	tan oak	To be determined	8 to 12 feet on center
Salix lucida	shining willow		
Shrubs			
Frangula californica ssp. *californica*	California coffeeberry	To be determined	6 to 8 feet on center
Lonicera hispidula	pink honeysuckle		
Rhododendron occidentale	western azalea		
Rubus parviflorus	thimbleberry		
Rubus ursinus	California blackberry		
Vaccinium ovatum	evergreen huckleberry		
Herbs and Ferns			
Athyrium filix-femina	lady fern	To be determined	3 to 4 feet on center
Equisetum telmateia subsp. *braunii*	giant horsetail		
Polystichum munitum	sword fern		

vi) ***Reveg Area 7:*** At the north end of Location 1, some disturbance and a road cut are proposed in the ruderal shoulder adjacent to developed property. No planting will occur in this area to stay in accordance with the clear recovery zone policy and because this area is regularly mowed for road maintenance. If the Revegetation Specialist determines that it is safe to work here after road modifications are complete, this area will be monitored for any newly introduced invasive plant species rated High or Moderate by the Cal-IPC, except for annual grasses. If newly introduced High or Moderate invasive plant species are found, they will be treated for the duration of the monitoring and maintenance period.

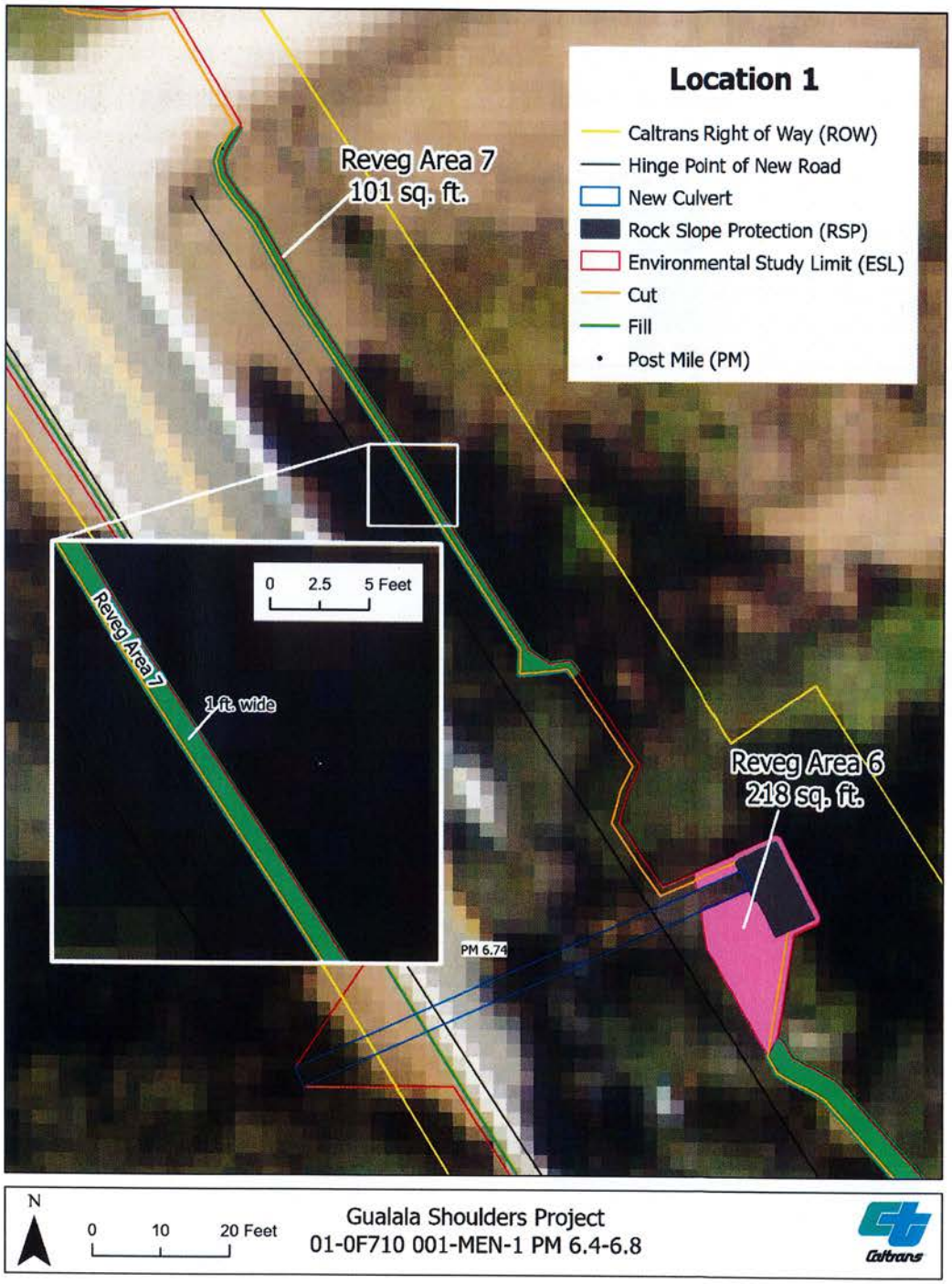

Figure 6. Map of Reveg Areas 6 and 7, from PM 6.74 to PM 6.79

vii) Reveg Area 8: At Location 2, one area is suitable for revegetation. Starting from PM 9.38 to PM 9.50, the upland bishop pine ESHA/SNC area would have approximately 1,863 square feet (0.0428 acre) of temporal impacts. If feasible and safe to work in this area, it will be revegetated with species from Table 7 and is shown in Figure 7.

Table 7. Potential planting palette for upland bishop pine habitat from PM 9.38 to 9.50.

Scientific Name	**Common Name**	**Quantity needed for initial planting**	**Planting Densities**
Trees			
Notholithocarpus densiflorus	tan oak	To be determined	8 to 12 feet on center
Pseudotsuga menziesii	Douglas fir		
Shrubs			
Baccharis pilularis	coyote brush	To be determined	6 to 8 feet on center
Frangula californica ssp. *californica*	California coffeeberry		
Lonicera hispidula	pink honeysuckle		
Morella californica	California wax myrtle		
Rubus ursinus	California blackberry		
Herbs and Ferns			
Fragaria vesca	wood strawberry	To be determined	3 to 4 feet on center
Iris douglasiana	Douglas iris		
Pteridium aquilinum var. *pubescens*	Western bracken fern		
Solidago spathulata	coast golden rod		

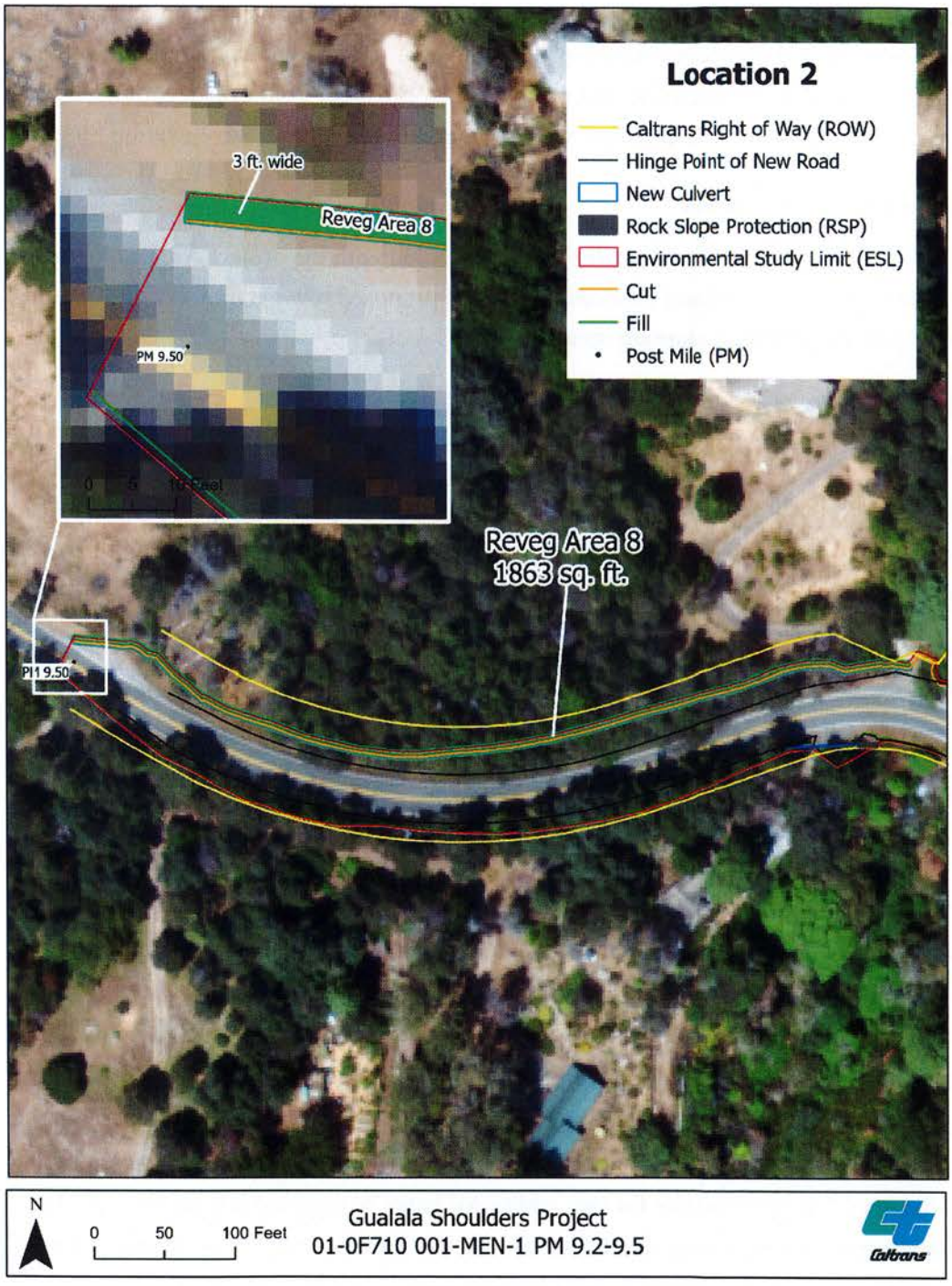

Figure 7. Map of Reveg Area 8, from PM 9.38 to 9.50.

d) Planting and Maintenance Contract and Duration

Revegetation planting of all areas, and maintenance for the five-year maintenance and monitoring period, including watering, weeding, and protecting resprouting native vegetation, will be contracted to and performed by the California Conservation Corps (CCC) or other qualified contractor, with oversight by a Caltrans Revegetation Specialist.

e) Cultural/Tribal Resources

The Caltrans Revegetation Specialist has coordinated with the project Archaeologist to confirm there are no cultural concerns regarding proposed revegetation activities in the vicinity of the proposed planting areas.

6) Implementation and Maintenance Schedule

a) Planting

Planting will occur approximately one year from completion of construction to allow erosion control seed to establish and microsite conditions to develop. To minimize plant stress, all planting will be installed at a time when the plants are dormant (i.e., typically November–March).

b) Watering

Watering will be conducted during the first two dry seasons following each planting (typically mid-May through October or November, approximately every other week), and/or any extensive dry period during the first two years following initial planting and replanting. Per a requirement from the NCRWQCB, the last two years of the monitoring period will not have supplemental watering. The exception to this is that Caltrans will not be held liable if drought conditions persist and require additional supplemental watering beyond the two years.

In cases where a minimal percentage of plants (i.e., generally up to 20%) need to be installed in Years 3 or 4 of monitoring to ensure the success criterion is met, watering will occur for two years after planting for the supplemental plants only. Because the supplemental planting is a minimal percentage of plants, Caltrans will not be required to maintain and monitor the site for two additional years beyond the last watering of the supplemental plants, as long as the site has met the success criterion at the end of the monitoring period and the supplemental plants appear healthy and established.

c) Weeding

Weeding will be conducted by hand and/or mechanical methods during the monitoring period to help installed and native volunteer and resprouting plants successfully establish. Weeding is typically performed once in the spring and once in the late summer or fall, or on a schedule appropriate to species' phenological timing to prevent spreading of weed seeds.

7) Monitoring Methods

Monitoring Methods and Schedule will include:

a) Photo points

Prior to construction, reproducible photo points will be established at the planting areas. Photo points will visually indicate native plant survival and re-establishment of vegetation. Photo points may be re-established prior to or at the time of planting to account for changes in the landscape due to construction and to provide the best view of revegetation areas.

b) Preconstruction monitoring:

Cal-IPC High and Moderate rated invasive species

The Revegetation Specialist, Project Biologist, and/or other Caltrans Environmental staff will conduct pre-construction surveys to establish which invasive species rated High or Moderate by Cal-IPC are present within the project area. This information will be presented in the Year 1 monitoring report.

c) Post-construction Annual Monitoring

i) Survival counts of native plants, in all planted areas

Census monitoring will be conducted after initial revegetation planting to assess establishment of native plants in the revegetation areas (frequency discussed below). Installed, volunteer, and resprouting native woody and herbaceous plants that are alive during monitoring will be counted, by species. Establishment of volunteer and resprouting native species will be included in the total plant count since these plants indicate revegetation is successfully occurring and a site is self-sustaining. Additionally, presence of volunteer and resprouting native plants will affect whether and how much replanting is needed, since overplanting is a concern.

ii) Survey for newly introduced noxious weeds

Any newly introduced invasive plant species rated High or Moderate by the Cal-IPC, except for annual grasses, found in reveg areas will be recorded. A species-specific treatment plan will be developed and implemented where safe access is possible.

d) Schedule

i) *Annual Monitoring*

Caltrans will monitor annually[3]. Photo points and survival counts will be monitored to assess progress toward the success criteria and identify remedial or adaptive management measures that may be required.

ii) *Year 5 Monitoring*

Final monitoring will assess whether the success criteria have been met.

8) Success Criteria

a) Year 5 Success Criteria

i) In all planted areas, 85% of installed plants will be alive in Year 5. Volunteer and/or resprouting plants may be counted towards this threshold.

ii) In planted areas and areas with weeding only, there will be less than 5% of newly introduced Moderate and/or High rated invasive plant species, except for non-native annual grasses.

9) Revegetation Monitoring Reports

Revegetation monitoring reports for Years 1, 3, and 5 will be submitted to all agencies requiring submission of revegetation monitoring reports. Monitoring reports will include a summary of monitoring results, discuss whether the revegetation areas appear to be on a

[3] First year monitoring may take place in the same calendar year as the initial planting as long as plant installation occurs before March 1st. First year monitoring may also occur in the same calendar year as initial planting if growing conditions at the planting site are suitable for planting after March 1st (e.g., plants are dormant) and plants appear to be successfully establishing near the end of the first growing season.

- If the first monitoring occurs in the same calendar year, it will occur at the end of summer to allow establishment of plants during the growing season.
- If monitoring occurs at least one year after planting, it will occur between May and end of summer.

trajectory toward meeting the success criteria, and will include any proposed remedial measures to ensure success. Monitoring reports will also include photo points. The final monitoring report will discuss whether the success criteria were met and if remedial actions are needed, or if revegetation is considered complete. Revegetation monitoring data and photos for Years 2 and 4 will be saved to the project file and made available upon request.

10) Remedial Measures

If the success criteria are not met, the Revegetation Specialist will assess potential reasons and develop remedial measures or adaptive management strategies to correct issues. Caltrans will coordinate with the permitting agencies that require revegetation reporting to discuss success criteria issues, propose solutions, and determine the best course of action for whatever criteria are not being met. Potential remedial measures may include additional seeding and/or plant installation, transplanting/dividing existing plants, additional watering and/or weeding, and other standard measures that provide additional plants or cover, as needed. Any remedial measures that are implemented will be discussed in monitoring report(s).

11) References

California Invasive Plant Council. 2006. *California Invasive Plant Inventory*. Cal-IPC Publication 2006-02. California Invasive Plant Council. Berkeley, CA. Available: www.cal-ipc.org

CDFW/VegCAMP. 2021. Wildlife and Habitat Data Analysis Branch. *California Natural Community List.* Vegetation Classification and Mapping Program. Sacramento, California. Available: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities

CNPS. 2022. A Manual of California Vegetation, Online Edition. http://www.cnps.org/cnps/vegetation/; searched on 16, November, 2022. California Native Plant Society, Sacramento, CA.

Jepson Flora Project (eds.) 2022. *Jepson eFlora,* https://ucjeps.berkeley.edu/eflora/ [accessed on September 13, 2022].

Appendix. Pre-Construction Photographs

Photo 1. **View of eastside shoulder looking north from approximate PM 6.50. Pacific reed grass meadow, palustrine emergent 3-parameter wetland, bishop pine forest (not impacted here), and future Reveg Area 1. Date of Photo: August 18, 2022.**

Photo 2. View of culvert at PM 6.60, looking north-east. Riparian area and future Reveg Area 2 and 3. Date of Photo: August 18, 2022.

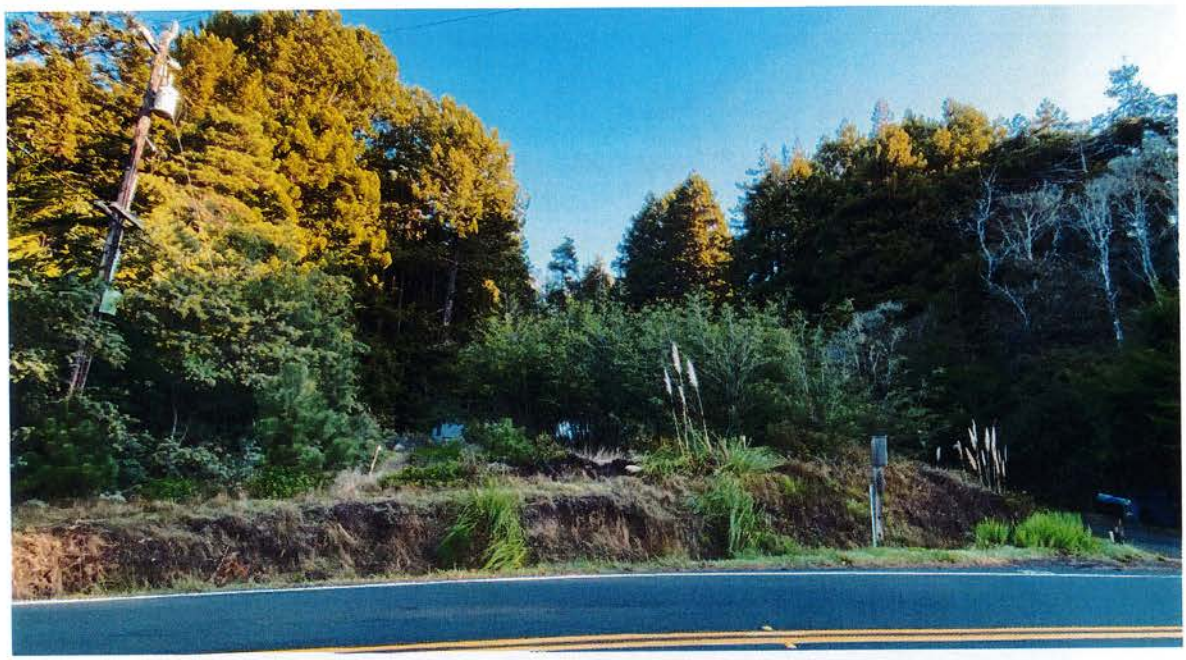

Photo 3. View of ruderal area north of PM 6.60 and future Pacific reed grass meadow, looking east from across SR 1.

Photo 4: Ruderal roadside and future Pacific reed grass meadow looking south with the northbound lane on SR 1 visible.

Photo 4. **View of upland area, looking west-northwest at approximate PM 6.71. Bishop pine forest proposed road cut area and future Reveg Area 3. Date of photo: August 18, 2022**

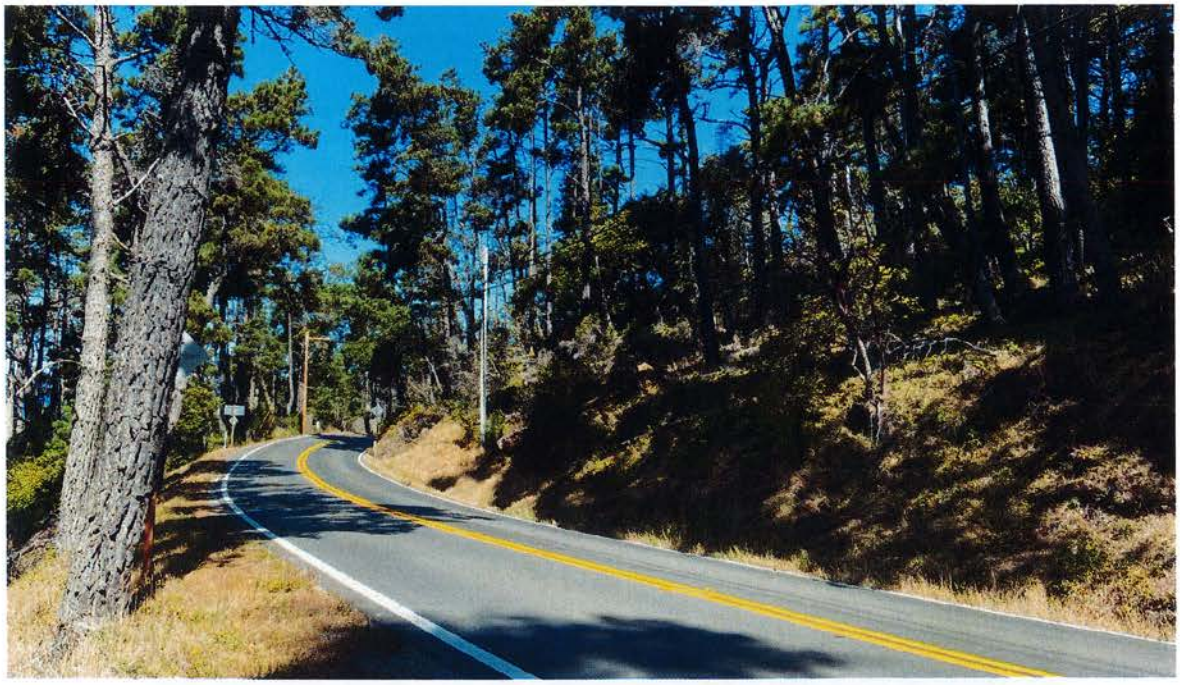

Photo 5. View of upland proposed road cut, looking northeast at approximate PM 6.70. Bishop pine forest and future Reveg Area 3. Date of photo: August 18, 2022.

Photo 6. View of culvert at PM 6.74, looking north. Riparian area and future Reveg Area 4. Date of photo: August 18, 2022.

Photo 7. View of ruderal proposed road cut at approximate PM 6.75, looking north. Future Reveg Area 5. Date of Google Earth Street View Image: April 2021.

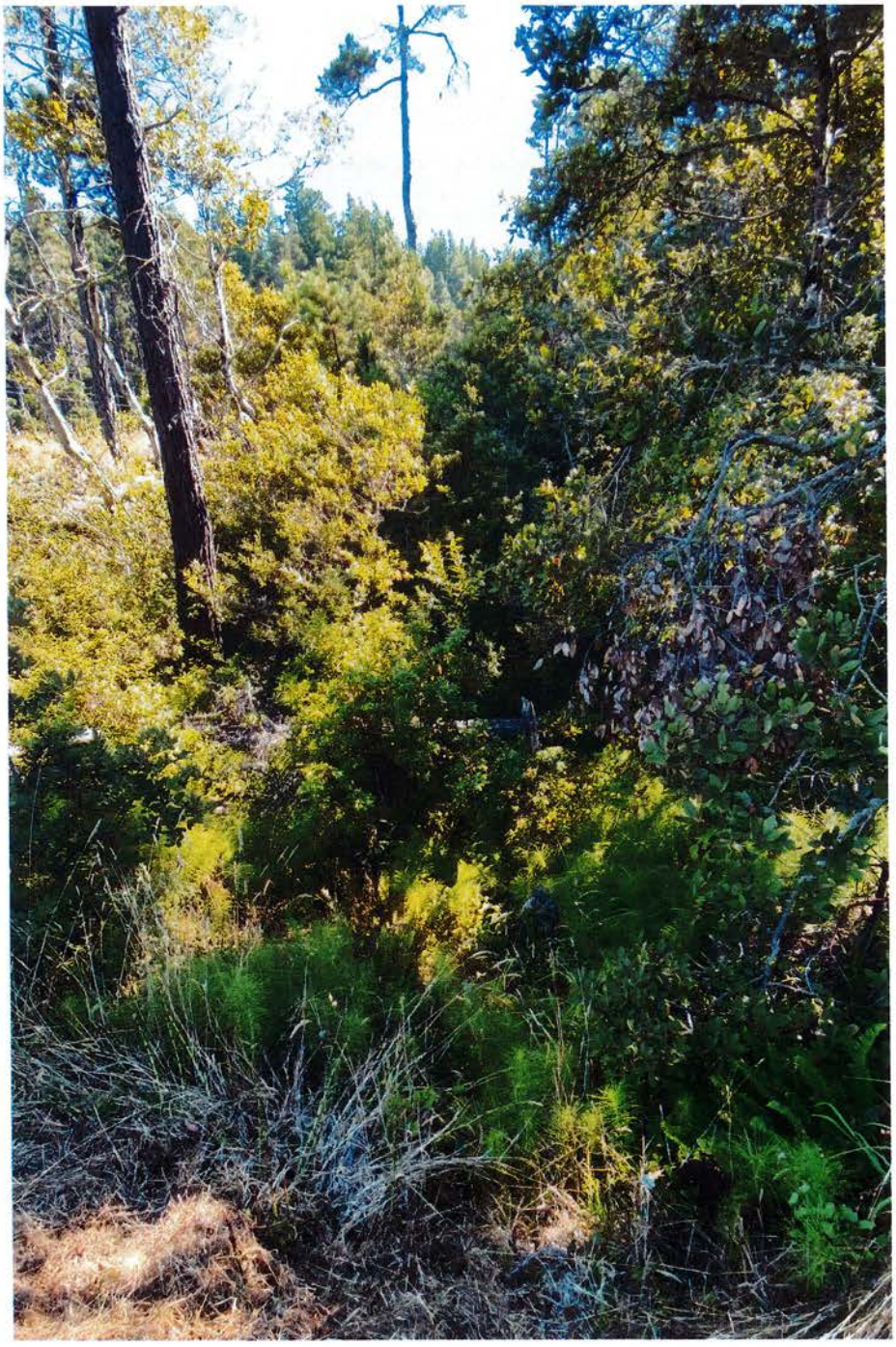

Photo 6. **View of culvert at PM 6.74, looking east. Riparian area and future Reveg Area 4. Date of photo: August 18, 2022.**

Photo 7. **View of upland proposed road cut at approximate PM 9.44, looking northeast. Bishop pine forest and future Reveg Area 6. Date of Google Earth Street View Image: April 2021.**

Photo 7. View of upland proposed road cut at approximate PM 9.44, looking southeast. Bishop pine forest and future Reveg Area 6. Date of Google Earth Street View Image: April 2021.