

ONSITE REVEGETATION PLAN  
for the  
MEN 1 WIDEN SHOULDERS PROJECT



**Mendocino County, State Route 1, Post Miles 65.13/65.49  
EA 01-0G600 / EFIS 0117000026**

**February 2021**



**STATE OF CALIFORNIA**  
Department of Transportation

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## 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 anticipated to require revegetation:**

- i. California Department of Fish and Wildlife (CDFW)
- ii. Mendocino County Planning and Building
- iii. North Coast Regional Water Quality Control Board (NCRWQCB)

**c) Contacts:**

- i. **Revegetation Specialist:** Jacob Hilliard  
1656 Union Street, Eureka, CA 95501 (707) 492-0028
- ii. **Project Biologist:** Tracy Walker  
1656 Union Street, Eureka, CA 95501 (707) 815-6503
- iii. **Project Manager:** Bryan Bet  
6301 North State Street, Redwood Valley, CA 95501 (707) 498-3018

## 2) Project Location

The project is located in the town of Cleone in Mendocino County on State Route 1 between post miles (PMs) 65.13 and 65.49 within Section 20, T19N, R17W of the Fort Bragg United States Geologic Survey (USGS) 7.5-Minute Quadrangle, approximately 3 miles north of Fort Bragg (Appendix A–Figure 1).

### 3) Construction Activities and Anticipated Impacts

#### a) Construction Activities

The project proposes road shoulder widening, drainage improvements, and road shoulder improvements along SR 1 between PMs 65.13 and 65.49 in Mendocino County. The project would widen the road shoulders to 4 feet on each side of SR 1 and pave the new shoulder width; install, remove, and replace various culvert sections; fill in and form the areas surrounding the culverts to the specified slope; relocate and install up to 13 drainage inlets within the existing Caltrans right of way (ROW); install hot mix asphalt (HMA) trapezoidal dikes adjacent to the east side of the northbound lane of SR 1; repave SR 1 with HMA and restripe and realign driveways and intersections; relocate one utility pole and removal of two guy wires; and create vegetated swales for stormwater runoff treatment on both the east and west sides of SR 1. Caltrans proposes to replace a 24" corrugated metal pipe (CMP) with an elliptical concrete pipe (ECP) at PM 65.16.

#### b) Anticipated Impacts

- i. Proposed project activities at PM 65.16 are anticipated to temporarily impact up to 217 square feet (0.005 acre) of upland riparian vegetation primarily comprising California blackberry (*Rubus ursinus*), Douglas spiraea (*Spiraea douglasii*), and Himalayan blackberry (*Rubus armeniacus*).
- ii. The ocular estimate of percent cover of woody riparian vegetation (California blackberry and Douglas spiraea) pre-construction is 70%.
- iii. The ocular estimate of non-native invasive riparian vegetation (Himalayan blackberry) is 30%.

### 4) Revegetation Goal

**The revegetation goal** is to ensure that woody upland riparian vegetation affected by construction at PM 65.16 is resprouting and re-establishing.

## 5) Summary of Revegetation Activities

### *Revegetation activities will include:*

#### *a) Erosion Control*

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

#### *b) Plant Species and Quantities*

No planting is proposed for this project. Natural vegetation recruitment (volunteers) and resprouting native vegetation is anticipated and will be incorporated into consideration of the revegetation goal. Douglas spiraea is a dense, clump-forming shrub which spreads by suckers, forming colonies over time, and will readily spread and reestablish following disturbance in this area.

If vegetation is cut at ground level prior to construction, then resprouting vegetation will be protected from herbivory and monitored for continued survival and re-establishment.

#### *c) Proposed Revegetation Areas*

The proposed revegetation area is located at PM 65.16 at the outlet side only (Appendix A–Figure 2). The riparian area affected by construction activities is within the existing Caltrans right of way (ROW). This area will be monitored to assess the resprouting and reestablishment of native riparian vegetation. The impact area outside of the existing Caltrans ROW will also be monitored for reestablishment of native riparian vegetation, pending formal approval by private landowners (approval process in progress). If the private landowner will not allow monitoring and maintenance activities of affected areas outside of the existing Caltrans ROW, then disturbed soils will receive a native erosion control seed mix. The area is dominated by native species such as Douglas spiraea and California blackberry.

**d) *Maintenance Contract and Duration***

Maintenance, including weeding and protecting resprouting native vegetation, will be performed by Caltrans staff and/or the California Conservation Corps (CCC) with oversight by a Caltrans Revegetation Specialist, for the proposed 3-year maintenance and monitoring period.

**e) *Cultural/Tribal Resources***

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

**6) *Maintenance Schedule***

Weeding will be conducted via hand methods during the monitoring period to help native volunteer and resprouting plants successfully establish. Himalayan blackberry will be targeted for removal during weeding and maintenance activities.

**7) *Monitoring Methods, Success Criteria and Reporting***

**a) *Monitoring methods and schedule will include:***

- i) ***Photo Points:*** Reproducible photo points were established at the revegetation area on February 4, 2021 (Appendix A—Figure 2 and Appendix B). Photo points will visually indicate native plant survival and re-establishment over the three years of monitoring. Photo points may be re-established prior to first year monitoring to account for changes in the landscape due to construction and to provide the best view of revegetation areas.
- ii) ***Percent Cover and Reestablishment of Native Woody Riparian Vegetation:*** In areas where upland riparian vegetation is affected by construction, percent cover of volunteer and resprouting upland riparian vegetation that is alive during monitoring will be assessed using ocular estimates by species. Increasing cover over time indicates revegetation is successfully occurring and the site is self-sustaining.

iii) **Schedule:** Caltrans will monitor the revegetation area annually. Native plant reestablishment will be monitored to assess progress toward the success of revegetation and identify remedial or adaptive management measures that may be required. Photo monitoring will also occur annually. First year monitoring at this location will take place in the first growing season following completion of construction.

**b) Success Criteria**

**Year 3 Success Criteria:**

- i) At least 85% of the baseline cover of woody riparian plants that were cut and/or removed for construction activities will be alive in monitoring Year 3. Volunteer and resprouting plants will contribute to the plant cover estimate.
- ii) Percent cover of Himalayan blackberry will be less than or equal to the preconstruction baseline estimate of 30%.

**c) Revegetation Monitoring Reports**

Revegetation monitoring reports will be submitted annually to all agencies requiring revegetation monitoring reports. Monitoring reports will be simple in nature and will include a brief summary of monitoring results, discuss whether the revegetation area appears to be on a trajectory towards successfully reestablishing, 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 criterion was met and whether remedial actions are needed, or revegetation is considered complete.

## **8) 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 and reporting to discuss success criteria issues, propose solutions, and determine the best course of action. Any remedial measures that are implemented will be discussed in monitoring report(s).





## APPENDICES

**Appendix A. Project Maps**

**Appendix B. Site Photos**



## Appendix A. **Project Maps**

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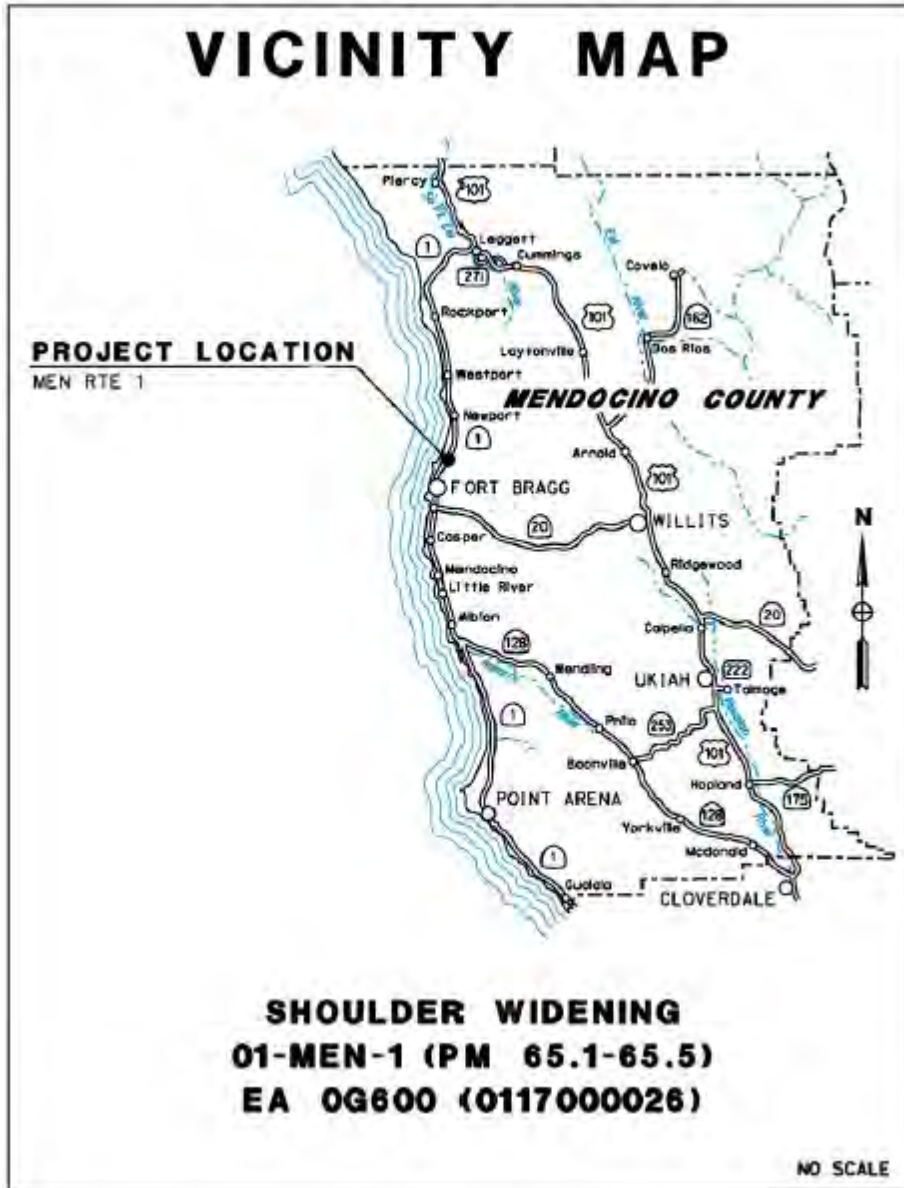


Figure 1. Project Vicinity Map





Figure 2. Proposed Revegetation Area and Photo Point Map (PM 65.16)





## Appendix B. **Pre-Construction Photographs**

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**Photo Point 1. View of culvert outlet and associated riparian vegetation, looking southwest.  
Date of Photo: February 4, 2021.**





**Photo Point 2.** View of riparian vegetation at culvert outlet, looking west.  
Date of Photo: February 4, 2021.





**Photo Point 3. View of culvert outlet and associated riparian vegetation, looking southwest.  
Date of Photo: February 4, 2021.**





**Photo Point 4. View of riparian vegetation at culvert outlet, looking west.  
Date of Photo: February 4, 2021.**