

# Memorandum

*Serious drought.  
Help save water!*

**To:** Julie East  
Environmental Planner

**Date:** January 20, 2016

**File:** 01-464800  
01-HUM-101  
Richardson Grove  
Addendum 4

**From:** Laura Lazzarotto  
Landscape Architect   
Caltrans District 1

**Subject:** **Richardson Grove Operational Improvement Project: Update to Visual Impact Assessment**

The following addendum to the VIA has been prepared for the Richardson Grove Operational Improvement Project on US Route 101 in and near Richardson Grove State Park in Humboldt County.

Since the 2010 Final EIR/EA and 2013 Supplement to the Final EA, the project footprint has been reduced in the following ways:

- Steeper cut slope at PM 1.34 resulting in shorter height and length of disturbed soil
- Steeper cut slope at PM 2.08 resulting in shorter height and length of disturbed soil
- Reduction in number of trees to be removed from 54 to 38, and as in previous reports, none are old-growth redwoods
- Depth of excavation for new road sections reduced to a maximum of 12 inches through the park
- Reduction in proposed roadway width through the park

In addition to the reduction in the project footprint, a crash cushion is proposed to be installed at the south end of the retaining wall safety barrier at PM 2.10.

The following clarifications about the affected environment are identified:

## **Station 69+00 to Station 71+50 (PM 1.293 to 1.35)**

West-

The proposed cut slope at PM 1.34 has been steepened. The new cut would be at a similar angle as the existing slope (1H:1V). The base of the new proposed cut slope is 80 feet wide, the same as previously proposed. The new proposed cut is 11 feet high, reduced from 40 feet as originally proposed. This is approximately 4.4 feet above the current top of cut. Both the existing and proposed cut slopes are triangular, wide along the roadside and tapering upslope.

The reduction of the cut slope requires fewer trees to be removed at this location, reducing the number from thirteen to eight. The eight trees consist of four Douglas-fir ranging from 11 to 15 inches in diameter at breast height (DBH is measured at 4.5 feet above the ground), two big-leaf

maple trees (17 inches and 22 inches in DBH), and two alders (18 inches and 24 inches in DBH). These are trees that have grown on the cut slope after it was originally constructed.

The original determination of the adverse visual impact of the cut slope footprint was moderate. The change in the forest canopy would be less with the reduced cut slope footprint, reducing the impact to low-moderate. The visual impact would be further reduced to low when native plant material revegetates the slope.

#### **Station 71+50 to Station 74+50 (PM 1.35 to 1.41)**

East –

Tree removal at this location would be reduced to four trees instead of the originally proposed five. The trees to be removed consist of one tanoak 19 inches in DBH, one Douglas-fir 6 inches in DBH, one California bay 6 inches in DBH, and one redwood 7 inches in DBH. The dense old-growth forest would continue to be the dominant visual feature along the highway.

#### **Station 74+50 to 90+00 (PM 1.41 to 1.70)**

The highway widens near Station 76+00. To the east, a big-leaf maple 9 inches in DBH would be removed. In the area where the Richardson Grove Visitor Center is located, what was previously a redwood sapling has grown into a five-inch DBH redwood which would be removed for the realignment.

Due to the addition of the concrete wall transition extension at Richardson Grove Undercrossing, two big-leaf maples 5 and 9 inches in DBH would be removed, along with minor amounts of vegetation adjacent to the existing metal beam guardrail.

Prior to reduction of the project footprint, five tanoaks ranging from 9 to 18 inches DBH were proposed for removal in this section. With the reduction of the project footprint at that location, the number of trees proposed to be removed is reduced to two tanoaks (10 and 14 inches in DBH).

The tree removal would have a minimal visual impact due to the small size of the trees in relation to the overall scale of the forest. The assessment of the visual quality in this section due to the reduction of project footprint has not changed from the original report: the visual impacts would be low. The dense old-growth forest would continue to be the dominant visual feature along the highway in this location.

There is an old-growth redwood tree, identified as Tree #73 in the Final Tree Report by Dennis Yniguez dated 8/14/15, which is 76 inches in DBH and is located approximately 200 feet to the north and west of the Visitor Center near station 82+20. Due to the proposed highway construction, Tree #73 could potentially develop a 10-15 foot dieback of wood in the uppermost crown if conventional construction methods were used without any protective measures.

Along this section of roadway, the height and density of old-growth redwoods allow for views through the trees in a horizontal plane, but their branching and heights restrict views of the tops of the trees themselves. Both park visitors and highway travelers are unable to see the tops of

redwoods in this location. If the uppermost top of Tree #73 were to die back, the die-back would not be visible; there would be no adverse visual impact.

#### **Station 107+00 to Station 111+00 (PM 2.02 to 2.10)**

West -

The proposed cut slope at PM 2.08 has been steepened. The new cut would be at a similar slope angle as the existing slope (0.5H:1V) and would meet the existing slope one foot above the existing cut. The proposed cut would be approximately 3 feet lower and 10 feet shorter in length than the originally proposed cut.

The modification of the cut slope from the previous design reduces the number of trees to be removed from twenty-eight to thirteen. Trees which would be removed are two tanoaks (7 inches and 12 inches in DBH), seven Douglas-fir (two with 7 inches and 12 inches in DBH and five which range from 21 inches to 25 inches in DBH), two live oaks (10 inches and 13 inches in DBH), and two redwoods (5 inches and 9 inches in DBH).

This modification from the original proposal reduces the loss of privacy that will be experienced by users of the cabins, which are above the cut slope. The modification would also reduce the exposure of the cabins to travelers along the highway from the original proposal. Therefore, with the smaller cut slope footprint, the adverse visual impact is lessened from high to moderate. Over time, the adverse visual impact would be further reduced as native plant material revegetates the slope and the regeneration of trees increase the privacy of the cabins.

East-

No existing vegetation would be impacted.

#### **Station 111+00 to Station 114+00 (PM 2.10 to 2.15)**

One additional tree, a redwood seven inches in DBH, would be removed at this location. There would be no change from the original visual impact determination.

A crash cushion similar to the one proposed at the bridge would be placed between the Singing Trees Recovery Center driveway and the southern end of the retaining wall. The crash cushion would have a black and yellow striped object marker plate on the end, a common element along highways, and would not reduce the visual quality.

#### **Station 65+55 to Station 108+25 (PM 1.13 to 2.05)**

Due to highway construction, eighteen old-growth trees within the park boundary may have some minor temporary loss of foliage if the project is constructed without protective measures. The foliage loss would likely be indistinguishable from the trees' natural cyclical foliage loss. There would not be a temporary adverse visual impact.

### **CONCLUSION**

Due to changes to the project description, this VIA Addendum 4 has determined that the overall impacts to the visual quality have been reduced. They are still less than substantial and require no mitigation.