

Memorandum

To: Kim Shultz, Santa Cruz County Regional Transportation Commission

From: Jeff Lormand, Principal Landscape Architect, Parsons Transportation Group

cc: Parag Mehta, Kimley Horn; Theresa Larson, Parsons Transportation Group

Date: October 4, 2017

Re: Santa Cruz Route 1 Tier I and Tier II Project – Addendum to the Visual Impact Assessment

1.0 Purpose and Organization of the Visual Impact Assessment Addendum

The purpose of this Addendum to the Visual Impact Assessment (VIA) of the Santa Cruz Route 1 Tier I and Tier II Project is to describe the current existing conditions of the Santa Cruz-Arana Gulch Landscape Unit, which includes the completed Morrissey to Soquel Auxiliary Lanes Project; to provide a more detailed description of cumulative impacts relative to the Morrissey- Soquel Auxiliary Lanes Project and the Route 1/ Route 17 Merge Lanes Project; and to provide a statement regarding the potential for modifications of the project description to change the visual impacts.

The VIA Addendum includes the Project Description (Section 2.0), followed by a description of Recent Projects (Section 3.0), the Existing Conditions in the Santa Cruz-Arana Gulch Landscape Unit (Section 4.0), a Statement Regarding Effects of Changes to Project Description (Section 5.0), a discussion of Cumulative Impacts (Section 6.0), and a list of Sources Consulted (Section 7.0).

2.0 Project Description

The California Department of Transportation (Caltrans), in cooperation with the Federal Highway Administration (FHWA) and the Santa Cruz County Regional Transportation Commission (RTC), proposes improvements to State Route 1 (Route 1) in Santa Cruz County. This project is divided into two components: the Tier I component from approximately 0.4 mile south of the San Andreas-Larkin Valley Road interchange to 0.3 mile north of the Morrissey Boulevard interchange, a distance of approximately 8.9 miles; and the Tier II component from 41st Avenue to Soquel Avenue/Drive.

Tier I Project

The VIA evaluates two build alternatives for the Tier I Project: a Tier I Corridor HOV Lane Alternative and a Tier I Corridor Transportation Systems Management (TSM) Alternative. Since the completion of the VIA, the description of each of these alternatives has been modified to assure avoidance of the upland habitat of the Santa Cruz long-toed habitat, in the southern portion of the alignment. The complete, updated project description is provided in Attachment 1. The modifications of the project description include the proposed elimination of the widening of some ramps at Rio Del Mar Boulevard, Freedom Boulevard, and San Andreas Road; other project features, such as shoulder paving and retaining walls associated with

ramp widening along the project corridor south of Rio Del Mar Boulevard, might be eliminated if, during future environmental review of other Tier II projects, the project features cannot be designed to avoid impact to upland habitat for the Santa Cruz long-toed salamander. These changes to the project description to address the protection of the salamander do not change the findings of the original visual impact assessment.

The Tier I Corridor HOV Lane Alternative

The Tier I Corridor HOV Lane Alternative would expand the existing four-lane highway to a six-lane facility by adding one HOV lane in each direction next to the median and an auxiliary lane on the outside in each direction. Expanding the highway from four lanes to six lanes would be achieved by building the new lane in each direction in the existing freeway median and widening the freeway footprint in those locations where the median is not wide enough to fit the new lane. The Tier I Corridor HOV Lane Alternative would modify or reconstruct all nine interchanges within the project limits to improve merging operations and ramp geometry. The Bay Avenue/Porter Street and 41st Avenue interchanges would be modified to operate as one interchange, with a frontage road to connect the two halves of the interchange. Where feasible, design deficiencies on existing ramps would be corrected. Ramp metering and HOV bypass lanes and mixed-flow lanes would be added to Route 1 on-ramps within the project limits. The Tier I Corridor HOV Lane Alternative would include an auxiliary lane in each direction between Freedom Boulevard and Bay Avenue/Porter Street and between 41st Avenue and Soquel Avenue/Drive. Transportation Operations System infrastructure, such as changeable message signs, highway advisory radio, microwave detection systems, and vehicle detection systems, would also be provided under the Tier I Corridor TSM Alternative. The Tier I Corridor HOV Alternative would not construct a northbound auxiliary lane between State Park Drive and Park Avenue.

Tier I Corridor TSM Alternative

The Tier I Corridor TSM Alternative proposes to add an auxiliary lane along the highway between major interchange pairs from Morrissey Boulevard to Freedom Boulevard, provide ramp metering, construct an HOV bypass lane and mixed-flow lane on on-ramps, and improve nonstandard geometric elements at various ramps, in both directions. The Tier I Corridor TSM Alternative also would include Transportation Operations System electronic equipment as described for the Tier I Corridor HOV Lane Alternative. In addition, the Tier I Corridor TSM Alternative would reconstruct the north and south Aptos railroad bridges and lower Route 1 in Aptos to achieve standard vertical clearance; reconstruct the State Park Drive, Capitola Avenue, and 41st Avenue overcrossings; widen the Aptos Creek Bridge; and construct three new pedestrian/ bicycle overcrossings over Route 1 at Mar Vista Drive, Chanticleer Avenue, and Trevethan Avenue. All of the aforementioned reconstructed bridges would include improvements to pedestrian and bicycle facilities. The Tier I Corridor TSM Alternative shares many features with the Tier I Corridor HOV Lane Alternative; the major exceptions are the absence of an HOV lane and a reconfiguration of only the Soquel Drive/Soquel Avenue interchange. The Tier I Corridor TSM Alternative would include a northbound auxiliary lane between State Park Drive and Park Avenue.

Tier II Project

One build alternative is evaluated for the Tier II Project: the Tier II Auxiliary Lane Alternative. This alternative would add an auxiliary lane to both the northbound and southbound directions of Route 1 between the 41st Avenue and Soquel Avenue/Drive interchanges. In addition, an Americans with Disabilities Act-compliant pedestrian and bicycle overcrossing would be constructed at Chanticleer

Avenue. The total roadway widening would be approximately 1.4 miles along Route 1. The new auxiliary lanes would be 12 feet wide. In the southbound direction, the width needed for the new lane would be added in the median, and the median barrier would be shifted approximately 5 feet toward the northbound side of the freeway to make room for the new lane and a standard 10-foot wide shoulder. Where the new southbound lane meets the existing ramps, outside shoulder widening would occur to achieve standard 10-foot wide shoulders. In the northbound direction, the project proposes to pave a 10-foot-wide median shoulder and widen to the outside to add the 12-foot wide auxiliary lane and a new 10-foot wide shoulder.

The pedestrian/bicycle overcrossing constructed at Chanticleer Avenue would connect to a new 360-foot long by 6-foot wide sidewalk on Chanticleer Avenue on the south side of Route 1. The sidewalk, located along the south side of Soquel Drive, would be separated from the street by a 4-foot wide park strip. Retaining walls would be constructed as part of the roadway widening along Route 1, with a total of four separate walls: three on the north side of the roadway and one on the south side. One of the retaining walls would start after the 41st Avenue on-ramp and extend approximately 150 feet; two other retaining walls on the northbound side would be 375 feet and 408 feet. On the southbound side, a 350-foot-long wall would be constructed along the highway mainline and Soquel Avenue, over the Rodeo Creek Gulch culvert.

No Build Alternative

The No Build Alternative offers a basis for comparing the Tier I Corridor Alternatives and the Tier II Auxiliary Lane Alternative in the future analysis year of 2035. Although the Tier I Corridor Alternatives and the Tier II Auxiliary Lane Alternative are separate projects, the assumptions regarding the No Build Alternative conditions are the same. Both assume no major construction on Route 1 through the Tier I corridor project limits or Tier II project limits other than currently planned and programmed improvements and continued routine maintenance. Planned and programmed improvements that are assumed in the No Build Alternative are the following, as contained in the 2014 Regional Transportation Plan:

- Installation of median barrier on Route 1 from Freedom Boulevard to Rio Del Mar Boulevard.
- Installation of a Class 1 bicycle and pedestrian facility on Morrissey Boulevard over Highway 1.
- Implementation of single interchange improvements at 41st Avenue and Bay Avenue/Porter Avenue as detailed and expensed in the Highway 1 HOV Project (RTC 24) as a standalone project, if the RTC project does not proceed.

The No Build Alternative also includes planned improvements to roadways and roadsides on Rio Del Mar Boulevard from Esplanade to Route 1, which includes the addition of bike lanes, transit turnouts, left-turn pockets, merge lanes, and intersection improvements. Road work includes major rehabilitation and maintenance of road and roadsides.

3.0 Recent Projects

Highway 1 Soquel to Morrissey Auxiliary Lanes Project

The Soquel to Morrissey Auxiliary Lanes Project added an auxiliary lane to Highway 1 between Soquel Avenue and Morrissey Boulevard, a distance of approximately one mile, in each direction. An auxiliary lane connects an on-ramp with the next off-ramp but is not designed for use by through traffic. The lane extends the weaving and merging distance between the ramps and improves traffic flow by providing greater separation between vehicles entering and exiting the freeway from mainline traffic.

The La Fonda Avenue overcrossing was replaced to accommodate the auxiliary lanes under the bridge, and includes a bike lane and a wider pedestrian sidewalk in each direction. The project reconfigured access into and out of Harbor High School to facilitate circulation during the construction phase as a transportation management plan effort; also a raised crosswalk was installed between the entrance and exit to Harbor High School to enhance pedestrian access and safety in the area. The pedestrian path between Park Way and La Fonda was reconstructed and new sidewalks were constructed at the Morrissey Boulevard Interchange, along Rooney Street and Morrissey Boulevard between Elk Street and San Juan Avenue.

Construction of the project started in February 2012 and, following a one-year plant establishment period, was completed in February 2015. A total of 3,590 trees, shrubs, and vines were planted; more specifically, 204 trees (big leaf maple, Catalina ironwood, and Chinese pistache, plus 94 coast redwoods); 3,160 shrubs (including acacia, escallonia, coyote bush, and Catalina cherry); and 226 vines (creeping fig and Boston ivy).

Route 1/ Route 17 Merge Lanes Project

Caltrans, in coordination with the Regional Transportation Commission and the Federal Highway Administration, completed improvements to the State Route 1/17 Interchange including reconstructing bridges and adding a merge lane in each direction between Highway 17 and the Morrissey/La Fonda area to address specific safety issues. The project began construction in spring of 2006 and was completed in the fall of 2008. Landscaping for the project was completed in 2010. Over 4,000 trees, shrubs, grasses and vines were planted in the project area at a replacement rate of approximately three to one.

4.0 Existing Conditions in the Santa Cruz-Arana Gulch Landscape Unit

The existing conditions of the Santa Cruz-Arana Gulch landscape unit are similar to the unit originally analyzed. Residential development is still the dominant development type in this landscape unit. The vegetation that existed along the Route 1 corridor during the initial VIA was removed as part of the construction for the Morrissey to Soquel Auxiliary Lanes Project, opening views that were partially screened. In addition, the slope along the northbound lanes has been setback and the vegetation removed to accommodate the auxiliary lane for the Morrissey to Soquel Auxiliary Lanes Project. The area of clearing extends from Soquel Avenue to Morrissey Boulevard. The new bridge at La Fonda is a larger structure than the original structure that was in place during the previous analysis. As part of the interface with the community on this aspect of the project, RTC and Caltrans District 5 conducted a community meeting to address the bridge aesthetics, which meets one of the mitigation measures outlined in the original Visual Impact Assessment Mitigation Measure VA-1).

The Route1/Route17 Merge Lanes project, under construction while the VIA field work was being conducted for the initial assessment, was completed prior to the 2013 completion of the VIA for the Route 1 Tier I and Tier II Project. The area of the Merge Lanes Project is also outside of the project corridor for the initial report, but was reflected in that there were some transitional areas around Morrissey Boulevard that were visible. These were addressed as part of the initial visual impact study.

Typical views from the initial VIA for the Santa Cruz-Arana Gulch unit have been updated, using the same locations and angles, to reflect the changed conditions, i.e., those that have resulted from the Morrissey to Soquel Auxiliary Lanes and the Route1/Route17 Merge Lanes projects; these can be seen in Figure 7.

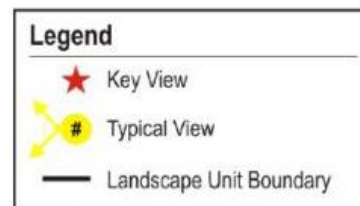
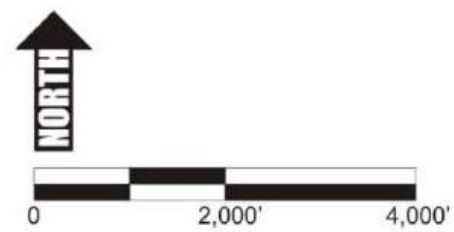
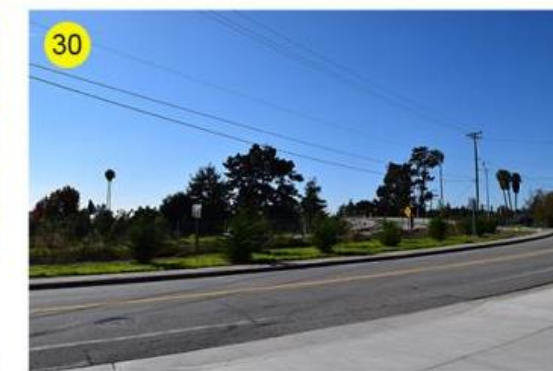
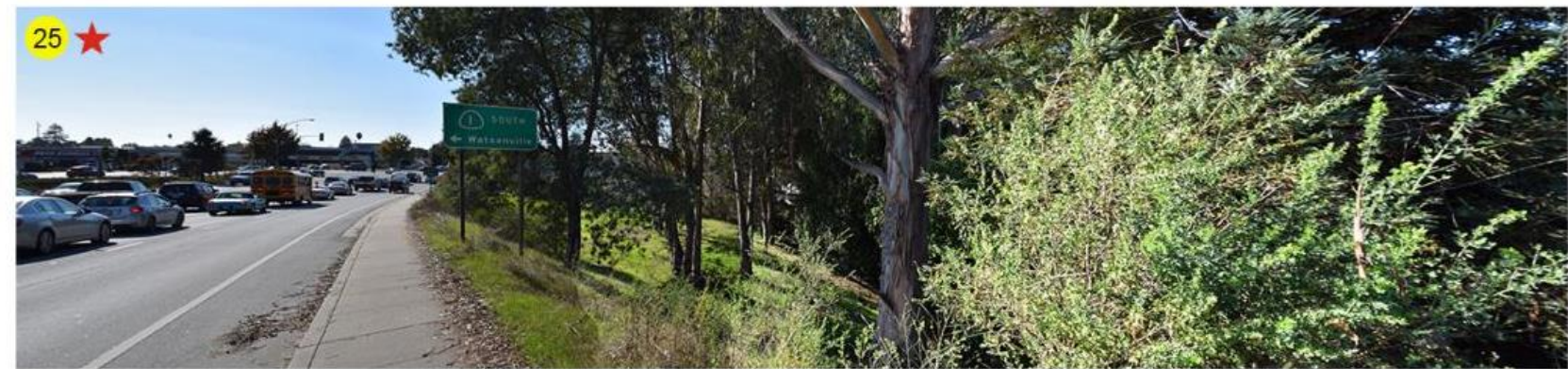
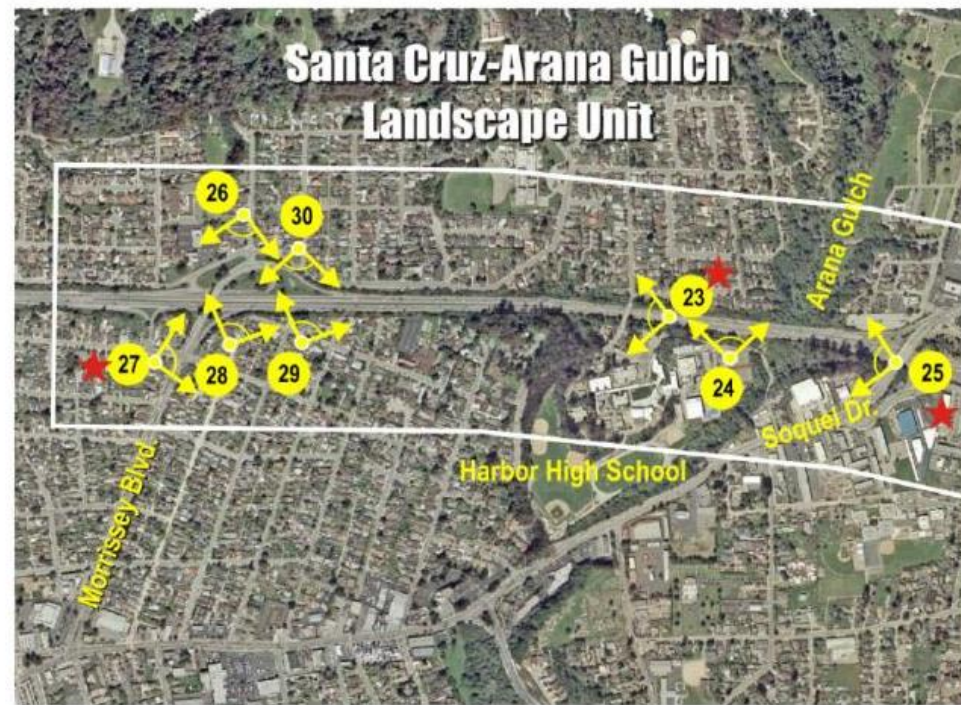


Figure 7: Santa Cruz-Arana Gulch Landscape Unit, Typical Views

Existing visual quality for this unit is still considered moderate to moderately high. As in the previous analysis of the existing environment for the unit, the vegetation associated with Arana Gulch and the screening plantings along the highway create a relatively high unity and intactness to the highway corridor. The skyline eucalyptus trees also add a high degree of vividness to the unit. Development of residential homes is low in density and height, which creates a moderate degree of intactness and unity.

5.0 Statement Regarding Effects of Changes to Project Description

The initial VIA understood that there would be substantial changes to the corridor within the Santa Cruz-Arana Gulch Landscape Unit due to the construction of the Auxiliary Lanes project, including the placement of the retaining wall along the northbound lanes of Route 1, the associated removal of vegetation, and the new, larger bridge structure for La Fonda Avenue. The proposed changes, described in the initial Tier I/Tier II project report, are anticipated to remain. These are primarily associated with the area of Soquel Avenue and Arana Gulch, particularly along the southbound lanes of Route 1. These impacts, as previously described, are anticipated to still be part of the proposed project impacts. No additional impacts are anticipated.

6.0 Cumulative Impacts

The initial VIA determined that the two Tier I build alternatives would result in a continuation of many of the same design elements that were first introduced into the corridor by the Route 1/Route 17 Merge Lanes Project and continued by the Route 1 Auxiliary Lanes Project between Soquel Drive and Morrissey Boulevard. Sound walls and retaining walls, wider pavement sections, and reduced planting areas from these two previous projects would increase the built environment of the Route 1 corridor, replacing the current vegetated visual appearances with one more associated with hardscape/paving elements. It was anticipated that the overall cumulative changes to the corridor under the Tier I Alternatives, coupled with the previous projects, would substantially change the visual environment along the Route 1 corridor.

The completion of the Morrissey to Soquel Auxiliary Lanes Project does not change this finding. Rather it reinforces the original determination that the trend of the proposed project would increase the urbanized character of the roadway. Figure A shows a comparison of the Route 1 Corridor before and after the Auxiliary Lane Project. From this, it can be seen that there is an increase in the hard surfaces associated with the roadway. Note that these photos, while generally from the same place, are not from exactly the same location and are shown here to illustrate the increase in hard surfaces associated with the corridor as a result of the proposed projects.



Figure A: Typical Viewpoint 23, before the Auxiliary Lane Project (top) and after (bottom).