

**FINAL**

# VISUAL IMPACT ASSESSMENT

## US 101 EXPRESS LANES PROJECT, SANTA CLARA COUNTY, CALIFORNIA

PROJECT NO. 0400001163/EA 04-2G7100  
04-SCL-101 PM 16.00–52.55  
04-SCL-85 PM 23.0–24.1

*Prepared for*

State of California  
Department of Transportation  
District 4  
111 Grand Avenue  
Oakland, CA 94612

*and*

Santa Clara Valley Transportation Authority  
3331 North First Street  
San Jose, CA 95134

**January 2013**

**URS**

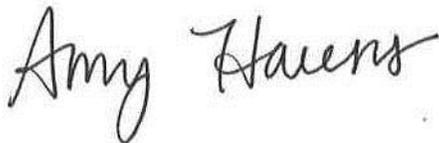
URS Corporation  
1333 Broadway, Suite 800  
Oakland, CA 94612

REVISED DRAFT  
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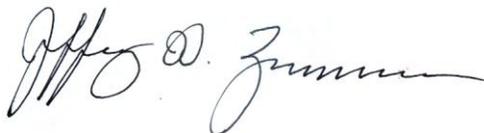


January 16, 2013

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Amy Havens, Preparer  
Environmental Planner, URS

Date



January 16, 2013

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Jeff Zimmerman, Approver  
Environmental Project Manager, URS

Date

# TABLE OF CONTENTS

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<b>Section 1</b>	<b>Introduction.....</b>	<b>1-1</b>
<b>Section 2</b>	<b>Existing Conditions and Project-Related Changes .....</b>	<b>2-1</b>
2.1	Existing Conditions.....	2-1
2.1.1	Scenic Resources in the Project Area .....	2-1
2.1.2	Scenic Quality of US 101 .....	2-1
2.1.3	Scenic Quality of SR 85.....	2-6
2.2	Project-Related Changes.....	2-7
2.2.1	Lane Restriping and Pavement Widening.....	2-7
2.2.2	Retaining Walls.....	2-9
2.2.3	US 101 Bridge Widening.....	2-9
2.2.4	Project Signage and Tolling Equipment .....	2-10
<b>Section 3</b>	<b>Visual Impact Assessment .....</b>	<b>3-1</b>
3.1	Project Impacts.....	3-1
3.1.1	Scenic Vistas, Scenic Resources, and Visual Quality.....	3-1
3.1.2	Light and Glare .....	3-3
3.2	Avoidance, Minimization, and/or Mitigation .....	3-4
<b>Section 4</b>	<b>References .....</b>	<b>4-1</b>

## Figures

Figure 1 Project Location and Regional Setting

Figure 2 Project Area

## Appendices

Appendix A Conceptual Sign Locations

The following abbreviated Visual Impact Assessment was prepared to evaluate the effects of the United States Highway 101 (US 101) Express Lanes Project in accordance with the California Department of Transportation (Caltrans) Visual Impact Assessment Guide (Caltrans 2008).

The Santa Clara Valley Transportation Authority (VTA), in cooperation with the California Department of Transportation (Caltrans), proposes to convert the existing High-Occupancy Vehicle (HOV) lanes along the United States Highway 101 (US 101) to High-Occupancy Toll (HOT) lanes (hereafter known as express lanes). A second express lane would be added in each direction on US 101 within the overall project limits from the East Dunne Avenue interchange in Morgan Hill to the Santa Clara/San Mateo County line, just north of the Oregon Expressway/Embarcadero Road interchange in Palo Alto (see Figures 1 and 2). The express lanes will allow HOVs and eligible clean air vehicles to continue to use the lanes for free and eligible single-occupant vehicles (SOVs) to pay a toll. The project would also convert the US 101/State Route (SR) 85 HOV direct connectors in Mountain View to express lane connectors, restripe the northern 1.1 miles of SR 85 to introduce a buffer separating the mixed flow lanes from the express lane, and connect the SR 85 express lanes to the US 101 express lanes. The project length is 36.55 miles on US 101 and 1.1 miles on SR 85, for a total of 37.65 miles.

The addition of the second express lane will involve a combination of inside and outside widening. The majority of the inside widening will occur within the US 101 segments south of the SR 85/US 101 interchange in southern San Jose where a wide unpaved median exists. The project proposes to widen and pave the median to accommodate the additional lanes. The outside widening will occur in the remainder of the corridor to accommodate the additional lanes where needed.

It is anticipated that the project will require limited right-of-way and Temporary Construction Easements (TCE). Right-of-way activities are currently being coordinated based on the approval of design exceptions. Utility relocations are anticipated due to the outside widening.

Bridge widening and modifications to existing overcrossing abutments will be required at a number of grade separations and undercrossings. Widening of creek bridges is not proposed as part of this project; however, the design does not prevent consideration of improvements to creek bridges in the future as funding is available. Any future improvements to bridges over creeks would be subject to additional environmental review.

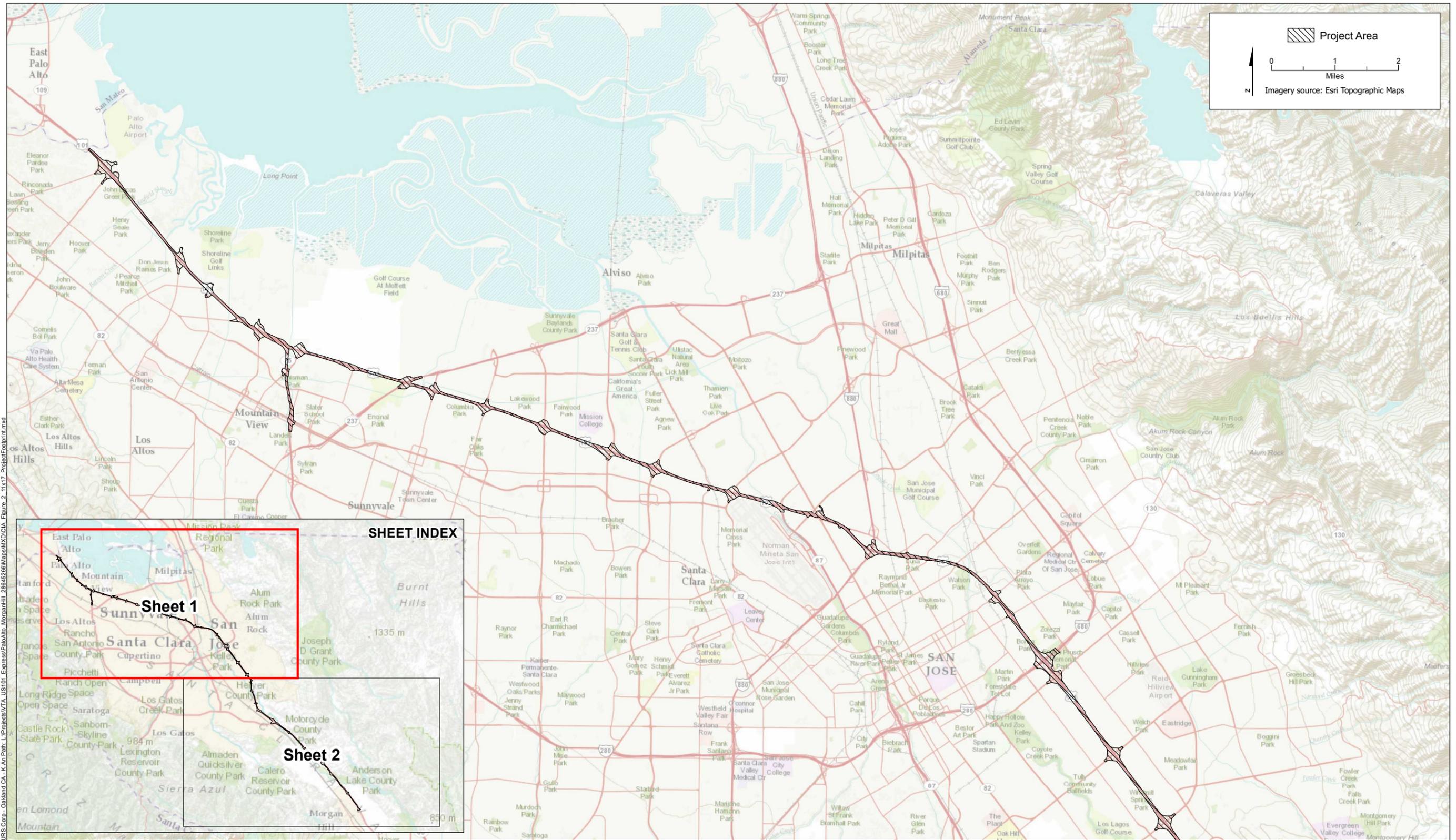
Overhead signs and tolling devices would be installed in the median throughout the project corridor. The piles for the overhead signs would be up to 6 feet in diameter and extend to approximately 30 feet below ground surface. The piles for the tolling devices would be up to 2.5 feet in diameter and would extend to approximately 10 feet below ground surface. Some Traffic Operations Systems (TOS) equipment such as traffic monitoring stations, Closed Circuit Televisions, cabinets, and controllers would be installed along the outside edge of pavement within the existing right-of-way.

Trenching would be conducted along the outside edge of pavement for installation of conduits. The depth of trenching would be 3 to 5 feet below the roadway surface. Conduits would be jacked across the freeway to the median where needed to provide power and communication feeds to the new overhead signage and tolling equipment. During construction, some lane and ramp closures would be required, but full freeway closures are not expected.

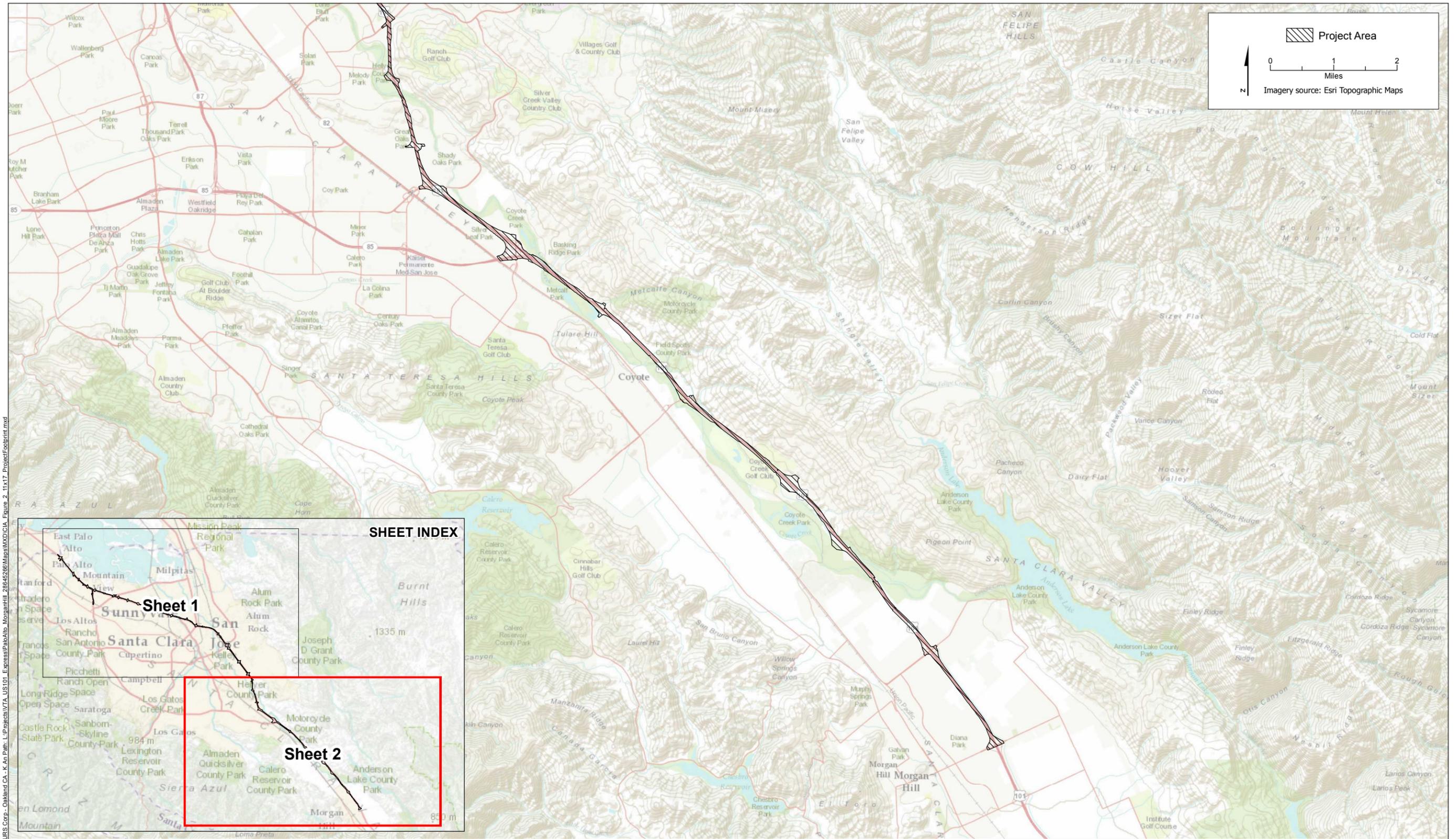


URS Corp., Oakland, CA; E. Bashir, Path, L. © projects/VTA, US 101 Express Lanes/Palo Alto, Morgan Hill, 28.645266/Maps/Max/Map/1.8x11, Project\_Location.mxd

**Figure 1**  
Project Location and Regional Setting



URS Corp. - Oakland CA - K-An Path - L-Projects-VTA - US101 ExpressLanesVTA - Mountain Hill - 286452681MapaMXD/CIA - Figure 2 - 11x17 ProjectFootprint.mxd



URS Corp. - Oakland CA - K-An Path - L-Projects-VTA - US101 - ExpressLanes-VTA - MorganHill - 286452861Maps\XDC\A - Figure 2 - 1x17 ProjectFootprint.mxd

## **2.1 EXISTING CONDITIONS**

### **2.1.1 Scenic Resources in the Project Area**

According to the Caltrans California Scenic Highway Mapping System, US 101 in the project corridor is not designated or eligible for designation as a state scenic highway (Caltrans 2007). However, the County of Santa Clara considers the South Valley Freeway (US 101 from Gilroy to the SR 85/US 101 interchange in southern San Jose) a Scenic Highway and proposes to add it to the *California Master Plan of Scenic Highways Eligible for Official Scenic Highway Designation* (County of Santa Clara 1994). In addition, the City of San Jose General Plan designates US 101 as a Rural Scenic Corridor from the southern limits of the City of San Jose to Metcalf Road. The City of San Jose General Plan states, “Development along designated Rural Scenic Corridors should preserve significant views of the Valley and Mountain, especially in, or adjacent to Coyote Valley, the Diablo Range, the Silver Creek Hills, the Santa Teresa Ridge and the Santa Cruz Mountains” (City of San Jose 2008).

SR 85 in the project corridor is not designated or eligible for designation as a state scenic highway (Caltrans 2007). In addition, SR 85 is not identified as a scenic highway or scenic corridor in any of the general plans that apply to the project area (Santa Clara County and Mountain View).

The portion of US 101 between just north of San Antonio Road and south of the Oregon Expressway is bordered on the east by Palo Alto Baylands Park and marsh areas of San Francisco Bay. The Bay Conservation and Development Commission (BCDC) has established design guidelines for roads along the Bay shoreline (including marshlands).

Caltrans has classified portions of the project corridor as Landscaped Freeway, a designation that is used to control the placement of outdoor advertising displays in landscaped areas adjacent to freeways (California Business and Professions Code Section 5440; Caltrans 2011). The 11 portions on US 101 classified as Landscaped Freeway total approximately 22.74 miles, and the one portion on SR 85 totals approximately 0.23 miles, for a grand total of 22.97 miles of the 37.65-mile project limits.

No scenic resources as defined by the California Environmental Quality Act (CEQA) or Chapter 27 of the Caltrans Standard Environmental Reference exist along the project corridor. According to the City of San Jose General Plan, “The City of San José has many scenic resources which include the broad sweep of the Santa Clara Valley, the hills and mountains which frame the Valley floor, the baylands, and the urban skyline itself, particularly high-rise development” (City of San Jose 2008). In addition, according to the South County Joint Area Plan (a portion of the Santa Clara County General Plan), “the visual integrity of the scenic gateways to the South County (Pacheco Pass, Hecker Pass, Route 101 south of Gilroy, and the Coyote greenbelt area north of Morgan Hill) should be protected” (County of Santa Clara 1994).

### **2.1.2 Scenic Quality of US 101**

The US 101 corridor can be separated into two distinct segments based on visual quality; East Dunne Avenue to the SR 85/US 101 interchange in southern San Jose and the SR 85/US 101

interchange in southern San Jose to the Santa Clara/San Mateo County line, just north of the Oregon Expressway/Embarcadero Road interchange.

The elevation of US 101 in relation to surrounding development is at-grade for the majority of the corridor. In several segments between just north of the Cochrane Road interchange to the Yerba Buena Road interchange, US 101 is depressed by as much as approximately 25 feet in relation to the development on the northbound side of the freeway.

*Segment 1: East Dunne Avenue to SR 85/US 101 Interchange in Southern San Jose*

US 101 between the southern project limit at East Dunne Avenue and the SR 85/US 101 interchange in San Jose is an approximately 11-mile stretch of roadway bordered by grasslands and rolling hills. There is residential development to the east of US 101 for the first mile south of the interchange, and residential and commercial development to the west and east of US 101 for the 2.5 miles north of the southern project limit. The 50-acre PG&E Metcalf Substation lies immediately to the west of US 101 approximately midway between the SR 85/US 101 interchange and the Bailey Road interchange. The substation contains several tall high-voltage transmission towers bearing lines that connect with similar towers west of the freeway and east of the substation. These facilities and the overhead lines dominate the viewshed for approximately 1.5 miles of this segment of US 101 (Exhibit A).

Sound walls are present for approximately one mile of this 11-mile segment of the project corridor, in two separate locations along southbound US 101. One sound wall is approximately 0.5 miles long and begins just south of the SR 85/US 101 interchange, bordering a residential development (Exhibit B). The other sound wall is approximately 0.5 mile long and begins just south of the East Main Avenue interchange (Exhibit C). From the US 101/SR 85 interchange to just north of Metcalf Road, the median is paved with a concrete median barrier; from just north of Metcalf Road to the southern project limit, the median contains ruderal disturbed vegetation. Northbound US 101 has two overhead sign gantries (one is shown in Exhibit D) that span the northbound lanes and are prominent to viewers on and around those segments. Motorists on this portion of the corridor observe high-voltage transmission towers and overhead lines, grasslands and trees, and a few areas of residential development to the west and east of US 101. In some locations, the Coyote Parkway lakes are visible to the west, along with distant views of the Santa Teresa Hills (Exhibit E). The portion of US 101 in the southern project corridor has moderate visual quality.



**Exhibit A.**  
Northbound US 101 north of Bailey Avenue in southern San Jose. The PG&E Metcalf Substation is just west (left) of the southbound lanes



**Exhibit B.**  
Southbound US 101 south of SR 85 interchange in southern San Jose, with a sound wall on the west side (right) of the freeway.



**Exhibit C.**  
Southbound US 101 just south of the East Main Avenue interchange in Morgan Hill, with a masonry wall on the west side (right) of the freeway



**Exhibit D.** Northbound US 101 south of SR 85 interchange in southern San Jose, with gantry in the foreground and residential development to the east (center and right side of photo)



**Exhibit E.** Northbound US 101 just north of the Coyote Creek Golf Drive interchange, with grasslands bordering the freeway and distant views of the Santa Teresa Hills to the west and rolling hills to the east.

*Segment 2: SR 85/US 101 Interchange in Southern San Jose to Santa Clara/San Mateo County Line*

US 101 between the SR 85/US 101 interchange in southern San Jose to the northern project limit at the Santa Clara/San Mateo County line is bordered primarily by dense urban development. Development along the freeway includes commercial and industrial buildings, residential communities, shopping centers, parking lots, hospitals, and schools (Exhibit F). Freeway facilities including sound walls and embankments, local street and railroad overcrossings, major interchange structures, pedestrian overcrossings, and signage gantries and cantilever structures that dominate the viewshed along the corridor.

The Norman Y. Mineta San Jose International Airport, Moffett Federal Airfield (Exhibit G), and the Palo Alto Airport of Santa Clara County border the corridor just north of the US 101/SR 87 interchange, just north of the US 101/SR 237 interchange, and on the east side of US 101 at Embarcadero Road, respectively. US 101 between Coyote Road and Yerba Buena Road is bordered by grasslands and Coyote Creek on the northbound side and Hellyer County Park on the southbound side; however, views from Hellyer County Park are blocked by sound walls

(Exhibit H). US 101 between just north of San Antonio Road and south of the Oregon Expressway is bordered on the east by Palo Alto Baylands Park and marsh areas of San Francisco Bay (Exhibit I); however, views of this area are mostly blocked by tall vegetation east of the freeway.

Sound walls, chain link fences, and low concrete walls are present along most of this segment of US 101; otherwise, native and landscaped trees and other vegetation border the roadway and block surrounding views. The median is paved and has either a concrete or metal median barrier, depending on the location. Motorists primarily observe tall vegetation and development along the corridor. A few portions of the corridor have distant views to the southwest of the foothills of the Santa Cruz Mountains. This segment of the US 101 corridor has low to moderate visual quality.



**Exhibit F.**  
Northbound  
US 101 just  
south of  
Lawrence  
Expressway,  
views of  
development,  
sound walls  
and vegetation  
bordering the  
freeway.



**Exhibit G.**  
Northbound  
US 101 just  
south of Ellis  
Road  
interchange,  
with Moffett  
Federal  
Airfield  
bordering the  
freeway to the  
east (right side  
of photo).



**Exhibit H.**  
Northbound  
US 101  
between  
Coyote Road  
and Yerba  
Buena Road  
interchange  
with  
grasslands  
and vegetation  
to the east and  
sound walls  
bordering the  
freeway to the  
west.



**Exhibit I.**  
Northbound  
US 101 north  
of San  
Antonio  
Road; Palo  
Alto Baylands  
Park to the  
east (right  
side of photo)

### 2.1.3 Scenic Quality of SR 85

SR 85 in the project limits is bordered by urban development on the southbound side and the Stevens Creek Trail on the northbound side. Freeway facilities include sound walls, signage gantries, and cantilever structures along the corridor. Development along the freeway includes residential communities and commercial development. Sound walls are present along the entire portion of SR 85 in the project limits (Exhibit J).

SR 85 in the project limits has low visual quality. Motorists on SR 85 generally observe sound walls (which in some locations are covered in ivy or other vegetation), mature trees and other landscaping. Views of the development and Stevens Creek Trail are shielded by sound walls, trees, or a combination.



**Exhibit J.  
Southbound  
SR 85 just  
south of the  
SR 85/US  
101  
Interchange  
in Mountain  
View, with  
sound walls  
and  
vegetation  
bordering  
the freeway.**

## **2.2 PROJECT-RELATED CHANGES**

The project would incrementally change the appearance of US 101 through lane restriping, pavement widening, bridge widening, the construction of retaining walls, and the installation of project signage and tolling equipment. No new sound walls or changes to existing sound walls are proposed. These project activities are described further below. Work on the portion of SR 85 at the US 101/SR 85 direct connectors in Mountain View will mainly consist of striping and signing and will not include widening or additional right-of-way.

### **2.2.1 Lane Restriping and Pavement Widening**

A dual express lane facility is proposed for the majority of the corridor, with the exception of short segments near the SR 85 express lane connectors where a single express lane is proposed. A single express lane is proposed between the SR 85 interchange and the Blossom Hill Road interchange in San Jose, and between the North Mathilda Avenue interchange and the SR 85 interchange in Mountain View.

The addition of the second express lane will involve a combination of inside and outside widening. The majority of the inside widening will take place within the US 101 segments south of the SR 85/US 101 interchange in southern San Jose where a 46- to 86- foot unpaved median exists. In these segments, pavement widening would be constructed in the median to accommodate the dual express lane facility. The outside widening will take place in the remainder of the corridor to accommodate the additional lanes where needed.

The express lanes facility would be separated from the adjacent mixed-flow lanes by a striped buffer. The buffer zone, delineated with solid stripes, will have designated openings to provide access into and out of the express lanes facility.

Inside and outside widening would result in the removal of native and landscaped tree and shrub species located along the edge of pavement, within median areas, and inside loop ramps. The approximate locations along the corridor where trees would be removed are detailed below:

- Northbound US 101 between the Moffett Boulevard and Ellis Street interchanges
- Northbound and southbound US 101 at the Ellis Street interchange in the area between US 101 and the on- and off-ramps
- Southbound US 101 between the Ellis Street and SR 237 interchanges
- Area just south of the SR 237 interchange on southbound US 101
- Area just south of the North Fair Oaks Avenue interchange on northbound US 101
- Northbound US 101 in the cloverleaf at the Lawrence Expressway interchange
- Southbound US 101 just south of the Lawrence Expressway interchange
- Northbound US 101 bordering Mission College between Lawrence Expressway and Bowers Avenue
- Southbound US 101 just south of the Bowers Avenue interchange
- Southbound US 101 between the Lafayette Street undercrossing and De La Cruz Boulevard/Trimble Road interchange
- The Oakland Road interchange in the area between US 101 and the on- and off-ramps
- The East Julian Street/McKee Road interchange in the area between US 101 and the on- and off-ramps
- Northbound US 101 between the Alum Rock Avenue and I-280 interchanges
- Northbound US 101 between the Tully Road and East Capitol Expressway interchanges
- Northbound and southbound US 101 between the Hellyer Avenue and Yerba Buena Road interchanges

Of the approximately 17 miles of outside widening that would take place along the corridor, 15 miles are designated as Landscaped Freeway (Section 2.1.1). The proposed pavement widening and potential tree removal would represent a moderate level of change to the visual setting.

**2.2.2 Retaining Walls**

A retaining wall would be required in the median between the northbound and southbound lanes from Cochrane Road to Bailey Avenue where there is an elevation difference between the northbound and southbound US 101 profiles. Retaining walls are also proposed in some locations on the outside shoulder of US 101 near the Yerba Buena Road, Brokaw Road/North 1st Street, and I-880 interchanges. The height of the retaining walls would range from 4 to 10 feet.

The proposed construction of retaining walls would represent a low to moderate level of change to the visual setting.

**2.2.3 US 101 Bridge Widening**

Bridge widening and modifications to existing overcrossing abutments would be required at a number of grade separations and undercrossings, as shown in Tables 1 and 2. Widening of creek bridges is not proposed as part of this project.

**Table 1 – Proposed Bridge Widening**

Bridge No.	Post Mile	Bridge Name	Type of Work	Existing Bridge Dimensions (feet)	Proposed Widening (feet)
37-344	21.25	Coyote Creek Golf Drive UC	Widen Bridge (Inside)	Left: 170 x 71 Right: 198 x 71	41 (Inside)
37-404	21.55	Utility Facility UC (Golf Course)	Widen Bridge (Inside)	84 x 82 (Left and Right)	41 (Inside)
37-347	27.01	Bernal Road UC	Widen Bridge (Inside)	Left: 214 x 69 Right: 214 x 92	25 (Inside)
37-108	29.72	Coyote Road UC	Widen Bridge (Inside and Outside)	132 x 72 (Left and Right)	9.5 Inside and 9.5 Outside
37-409	31	Yerba Buena Road UC	Widen Bridge (Inside and Outside)	159 x 70 (Left and Right)	11 Inside and 11 Outside

UC = undercrossing; NB = northbound; SB = southbound

**Table 2 – Proposed Modification to Bridge Abutments**

Bridge No.	Post Mile	Bridge Name	Type of Work
37-668	33.03	Tully Road OC	Modify Abutments
37-222	35.46	San Antonio Street OC	Modify Abutments
37-48	35.76	Santa Clara Street OC	Modify Abutments

37-123	36.12	Julian/McKee Road OC	Modify NB Abutment
37-115	37.99	North San Jose UP	Modify Abutments
37-118	38.09	10 <sup>th</sup> Street OC	Modify SB Abutment
37-403R	39.90	Jct Route 87/101 SEP	Modify SB Abutments
37-183G	39.91	Jct Route 87/101 SEP	Modify SB Abutment
37-390	42.73	Bowers Avenue OC	Modify Abutments
37-152	43.85	Lawrence Expressway	Modify Abutments

UC = undercrossing; OC = overcrossing; UP = underpass; SEP = separation grade

As shown in Table 1, the proposed inside and outside bridge widening ranges from 9.5 to 41 feet. The bridges are in areas where existing transportation facilities (roadways, bridges, and embankments) dominate the immediate viewshed. The proposed bridge work would be visible to motorists on US 101 and, to a lesser extent, to nearby viewers outside of the freeway corridor. The proposed bridge work would represent a low level of change to the visual setting.

**2.2.4 Project Signage and Tolling Equipment**

Project signage would introduce a low to moderate level of change to the existing environment. In the southbound direction, express lane signage would begin on US 101 at the Santa Clara/San Mateo County line and end just north of the Burnett Avenue interchange. In the northbound direction, express lane signage would begin on US 101 just north of the East Dunne interchange and end just south of the Ellis Street interchange. No signs are currently proposed on SR 85 in the project limits or on US 101 in Mountain View.

In general, each set of entry and exit points for the express lanes would have three signs that convey the following information:

- Express lane entrance in 1 mile
- Express lane entrance in 0.65 mile, with the current toll rate shown in a dynamic message sign (DMS) panel for SOV use of the express lanes (see Exhibit K, below); when tolls are not being collected, the DMS panels would read “Open to All”
- Express lane entrance and exit (see Exhibits L and M, below)



**Exhibit K. Representative view of an entrance/toll sign with DMS (from I-680 southbound express lanes in Fremont)**



**Exhibit L. Representative view of an express lane entrance sign (from I-680 southbound express lanes in Fremont)**



**Exhibit M. Sample express lane exit signs**

Smaller signs would also be mounted on the median barrier. The signs would be the same as or similar to existing HOV lane signage but in different locations. Some existing HOV lane signage will be removed. Appendix A contains a figure illustrating the preliminary conceptual sign locations and appearance of the signs.

The cantilever structures mounted with toll collection equipment (see Exhibit N, below) would also be approximately 26 feet in height. FasTrak electronic tolling system equipment would communicate with the FasTrak transponders in single-occupant vehicles in the express lanes to record and charge for trips. The tolling structures would have a relatively slender profile and represent a low level of change to the existing environment.



**Exhibit N.  
Representative  
view of a toll  
structure (from  
I-680  
southbound  
express lanes in  
Fremont)**

Approximately 24 sets of express lane signs and 24 tolling structures are anticipated to be installed over the 37.65-mile project corridor. The overhead signs and tolling structures would be installed within the medians of US 101. In some locations, the express lane signs would replace existing signs or be added to existing overhead gantries. The exact number and locations of these features will be determined during the project design phase in coordination with the toll system design. As noted in Section 1, some TOS equipment such as traffic monitoring stations, Closed Circuit Televisions, cabinets, and controllers would be installed along the outside edge of pavement within the existing right-of-way. The specific locations of these features would be developed during final project design. The equipment would be small in scale and consistent with a freeway facility and the existing visual character of the project corridor.

### **3.1 PROJECT IMPACTS**

This section describes the potential effects of project-related changes on nearby viewers and the visual environment.

#### **3.1.1 Scenic Vistas, Scenic Resources, and Visual Quality**

##### **3.1.1.1 Lane Restriping and Pavement Widening**

Lane restriping and pavement widening would be primarily noticeable to motorists during the construction period only. These changes would not affect viewers outside of the freeway corridor.

Pavement widening would permanently affect approximately 77 acres of naturally occurring vegetation including 7 acres of ruderal California annual grassland (invasive weed species and exotic grasses) and 67 acres of ruderal disturbed vegetation (a mixture of bare ground and ruderal vegetation). As the project contains approximately 417 acres of naturally occurring vegetation including 185 acres of ruderal California annual grassland and 195 acres of ruderal disturbed vegetation (URS 2012), removal of these areas of vegetation are not expected to affect views for motorists on US 101 or viewers outside of the freeway corridor. Landscaped and non-native trees would be removed along the edge of pavement and inside the on- and off-ramps during construction to accommodate outside widening. In some cases, tree removal may expose areas of sound walls to motorists along the corridor and viewers outside the corridor. In accordance with Caltrans policy, landscaping and irrigation that is damaged or removed during project construction will be replaced in kind and in the same general location, therefore, tree removal would not substantially affect the visual quality of these areas.

Outside widening would take place in areas of the corridor that are designated as Landscaped Freeway. As mentioned above, landscaped areas that are damaged or removed would be replanted, therefore, individual portions of Landscaped Freeway would not be divided as to create new gaps that are longer than 200 feet in length, and continuous portions of Landscaped Freeway would not be shortened to less than 1,000 feet. As a result, there would not be an increase in portions of highway that are not considered Landscaped Freeway or a change the conditions of controlling outdoor displays.

These project activities would not affect scenic vistas, scenic resources, or visual quality in or around the project corridor.

##### **3.1.1.2 Retaining Walls**

Retaining walls would be constructed in the median of US 101 from Cochrane Road to Bailey Road and along the shoulder of US 101 near the Yerba Buena Road, Brokaw Road/North 1<sup>st</sup> Street, and I-880 interchanges. The height of the retaining walls would range from 4 to 10 feet and would be consistent with the corridor's existing visual character. Although the walls may block long-range views of the hills and ridgelines to the west, east and northeast, the views would be short in duration for motorists moving at freeway speeds. The walls are not expected to affect views for viewers outside of the freeway corridor. An aesthetic treatment of the walls

would be included as part of the project design. These project elements are not expected to have a significant effect on visual quality.

### **3.1.1.3 US 101 Bridge Widening**

The project would require bridge widening at a number of grade separations and undercrossings, as well as modifications to existing overcrossing abutments. Widening is proposed for the bridges at Coyote Creek Golf Drive, the Utility Facility (Golf Course), Bernal Road, Coyote Road, and Yerba Buena Road. Modifications to abutments are proposed for the bridges at Tully Road, San Antonio Street, Santa Clara Street, Julian/McKee, North San Jose underpass, 10<sup>th</sup> Street, State Route 87/US 101, and Bowers Avenue and Lawrence Expressway. The proposed bridge work would be visible to motorists on US 101 and, to a lesser extent, to nearby viewers outside of the freeway corridor.

Widening the US 101 bridges would not substantially change the visual quality for motorists on US 101, or viewers on the streets beneath the bridges. Foreground views of the bridge areas from US 101 would be fleeting at freeway speeds. The bridges at Coyote Creek Golf Drive, golf course utility facility, and Bernal Road would be widened toward the median rather than toward the outer edges of the freeway, thereby reducing potential visual impacts for long-range views on US 101 and viewers outside of the US 101 corridor. At Coyote Road and Yerba Buena Road, the bridges would be widened both inside and outside, however the bridges are in areas that are already dominated by views of overhead signage and overhead utility lines. The proposed bridge widening would not degrade views for people approaching or passing under the bridges.

By closing the existing gaps between northbound and southbound US 101 bridges, the project would decrease natural light on short segments of the local streets and sidewalks directly under US 101. Overall, the visual change that would result from closing the bridge gaps would be minor and consistent with similar freeway crossings in the local and regional area. The loss of small areas of natural light from bridge widening would not affect viewers on or above the grade of US 101 and would not substantially degrade views for those on the local streets below the bridge crossings.

To allow for construction of abutments and new bridge decking, small amounts of landscaped and ruderal vegetation may need to be removed from embankments between existing northbound and southbound bridge abutments. The loss of small amounts of vegetation in these areas would not substantially affect the visual quality of these areas. As mentioned in Section 3.1.1.1, i, landscaping and irrigation that is damaged or removed during project construction will be replaced in kind and in the same general location.

### **3.1.1.4 Project Signage and Tolling Equipment**

US 101 already contains overhead signs, including DMS and gantry structures with multiple signs. The proposed overhead signs and tolling structures would be consistent with the visual context of the existing freeway setting and with existing signage in the corridor and in Santa Clara County. These project features would be visible in the foreground of motorists' distant

views of Santa Teresa Hills to the west, the Mount Hamilton Range to the southeast, and the rolling hills to the east, but views would be short in duration for motorists moving at freeway speeds.

The signs and tolling structures would also be visible to viewers at the various land uses adjacent to both sides of US 101 in locations where the freeway corridor is not shielded by sound walls, trees, or development. The additional signage and toll structures would be visually compatible with this highly trafficked corridor and its segments of urbanization. The scale of the signs would be relatively small in the context of the existing viewshed and would not block long-range views of the hills and ridgelines to the west, east and northeast.

The tolling structures would have a relatively slender profile and represent a low level of change to the existing environment. The proposed roadside TOS equipment and median barrier-mounted signs would be small in scale and consistent with the corridor's existing visual character. These project elements are expected to have little, if any, effect on visual quality.

The segment of US 101 south of the SR 85/US 101 interchange in southern San Jose has been designated as a County Scenic Highway (southward to Gilroy; County of Santa Clara 1994) and a City of San Jose Rural Scenic Corridor (from Metcalf Road to Bailey Avenue; City of San Jose 2008). As noted in Section 2.1.3, the viewshed of approximately 1.5 mile of this 11-mile segment is dominated by high-voltage transmission towers and lines on both sides of the freeway (Exhibit A), and particularly by the PG&E Metcalf Substation immediately west of US 101. Northbound US 101 in that segment contains prominent roadway signage, including two sign gantries that span the northbound lanes, one of which is shown in Exhibit D. Southbound US 101 contains an exit sign for the existing double HOV lane connector from SR 85, which would be replaced with an exit sign for the express lane facility. The modification of existing signage or addition of a small number signs in this area would not substantially affect the visual quality of this segment. The project signage and tolling equipment would not conflict with Santa Clara County General Plan or City of San Jose General Plan scenic preservation goals for this segment of US 101.

The TOS equipment such as traffic monitoring stations, Closed Circuit Televisions, cabinets, and controllers would be installed along the outside edge of pavement within the existing right-of-way. The specific locations of these features would be developed during final project design. The equipment would be small in scale and consistent with a freeway facility and the existing visual character of the project corridor.

Project signs are proposed in the segment of US 101 north of the SR 85/US 101 interchange in Mountain View. However, these features would not affect the visual quality of US 101 in those areas or conflict with BCDC visual guidelines for roads along the Bay shoreline.

The project would not have a substantial adverse effect on a scenic vista, damage scenic resources within a state scenic highway, or substantially degrade the existing visual quality of the project corridor.

### **3.1.2 Light and Glare**

Lighting associated with the overhead signage is not expected to result in light intrusion or glare to motorists on US 101 or to residents along the freeway. The DMS components of the signage will have sensors that automatically adjust the brightness of the toll cost numbers to ambient

light conditions, so that the light-emitting diode (LED) components are no brighter than needed for motorist visibility at any time.

Lighting for non-DMS signage would be activated by photocell sensors and would have a fixed level of brightness. Signs listing upcoming exits and distances, as well as other roadway signs that do not direct motorist actions, are not required to be illuminated unless the signs are illegible without fixed lighting. Toll structures would not be illuminated.

Residential development adjacent to US 101 occurs throughout the project corridor. In all of these areas, light from project signage would either be shielded by sound walls or trees, or at a sufficient distance that daytime or nighttime glare or light intrusion is not anticipated outside of the freeway corridor. The signage would be illuminated as needed for motorist visibility and safety and would not result in inappropriate intensities of light and glare.

### **3.2 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION**

As the project is not expected to result in visual impacts, no avoidance, minimization, and/or mitigation measures are proposed.

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**Appendix A**  
**Conceptual Sign Locations**

