



Visual Impact Assessment

*I-80/SR 65 Interchange Improvements Project
Placer County, Interstate 80 and State Route 65*

*03-PLA-80-PM 1.9 to 6.1
03-PLA-65-PM R4.8 to R7.3*

EA 03-4E3200

November 2014

VISUAL IMPACT ASSESSMENT

I-80/SR 65 Interchange Improvements Project

November 2014

California Department of Transportation
District 3, Placer County, Interstate 80 and
State Route 65

03-PLA-80-PM 1.9 to 6.1
03-PLA-65-PM R4.8 to R7.3
EA 03-4E3200

Prepared by: _____

J. Stock

Date: November 4, 2014

Jennifer Stock

ICF International

CA License # 5155

Project Landscape Architect

Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY	1
II. PURPOSE OF STUDY	1
III. PROJECT DESCRIPTION	1
Location.....	2
Purpose and Need.....	2
Alternatives	4
COMMON DESIGN FEATURES OF THE BUILD ALTERNATIVES.....	4
ALTERNATIVE 1—TAYLOR ROAD FULL ACCESS INTERCHANGE	13
ALTERNATIVE 2—COLLECTOR-DISTRIBUTOR SYSTEM RAMPS	13
ALTERNATIVE 3—TAYLOR ROAD INTERCHANGE ELIMINATED	14
NO-BUILD ALTERNATIVE (NO-PROJECT).....	14
Project Phasing.....	14
Phase 1-SR 65	14
Phase 2-Southbound to Eastbound and Eastbound to Northbound Connector Ramps	15
Phase 3-I-80 Mainline	15
Phase 4-HOV Connector.....	15
Staging, Storage, and Proposed Access during Construction	15
Phase 1-SR 65	15
Phase 2-Southbound to Eastbound and Eastbound to Northbound Connector Ramps	16
Phase 3-I-80 Mainline	16
Phase 4-HOV Connector.....	17
Utility Relocations	17
CONSOLIDATED COMMUNICATIONS (FORMERLY SUREWEST).....	17
PLACER COUNTY WATER AGENCY.....	17
PACIFIC GAS AND ELECTRIC.....	17
IV. PROJECT LOCATION AND SETTING	17
V. ASSESSMENT METHOD	18
VI. VISUAL ASSESSMENT UNITS AND KEY VIEWS	18
VII. VISUAL RESOURCES AND RESOURCE CHANGE	22
Visual Resources	23
VISUAL CHARACTER	23
VISUAL QUALITY	24
Resource Change.....	25

VIII. VIEWERS AND VIEWER RESPONSE	26
Types of Viewers	26
HIGHWAY NEIGHBORS (<i>Views to the Road</i>)	26
HIGHWAY USERS (<i>Views from the Road</i>)	26
Viewer Response.....	26
VIEWER EXPOSURE.....	27
VIEWER SENSITIVITY.....	27
REGULATIONS	28
GROUP VIEWER RESPONSE	36
IX. VISUAL IMPACTS	36
Determining Resource Change	36
Determining Viewer Response.....	37
Determining Visual Impacts	37
Visual Impacts by Visual Assessment Unit and Alternative	38
I-80 CORRIDOR VISUAL ASSESSMENT UNIT.....	39
SR 65 CORRIDOR VISUAL ASSESSMENT UNIT	54
OPEN SPACE VISUAL ASSESSMENT UNIT.....	61
RESIDENTIAL VISUAL ASSESSMENT UNIT	65
COMMERCIAL/INSTITUTIONAL VISUAL ASSESSMENT UNIT	69
SUMMARY OF VISUAL IMPACTS BY VISUAL ASSESSMENT UNIT AND ALTERNATIVE	77
X. PROJECT VISUAL IMPACTS SUMMARY	78
Temporary Construction Visual Impacts.....	78
XI. CUMULATIVE VISUAL IMPACTS.....	78
XII. AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES.....	79
Summary of Avoidance, Minimization, and/or Mitigation Measures by Alternative.....	82
XIII. CONCLUSIONS	82
XIII. REFERENCES	83
Written References	83
Personal Communications	83

LIST OF FIGURES

Page

Figure 1: Project Location Project Alternatives 3

Figure 2: Alternative 1 – Taylor Road Full Access Interchange 7

Figure 3: Alternative 2 – Collector–Distributor System Ramps 9

Figure 4: Alternative 3 – Taylor Road Interchange Eliminated 11

Figure 5: Visual Assessment Units 19

Key View 1a, Existing View and Alternative 1 Simulated Conditions—from Eastbound I-80 near the SR 65 Exit..... 43

Key View 2a, Existing View and Alternative 1 Simulated Conditions—from Westbound I-80 near the SR 65 Exit..... 44

Key View 1b, Existing View and Alternative 2 Simulated Conditions—from Eastbound I-80 near the SR 65 Exit..... 48

Key View 2b, Existing View and Alternatives 2 and 3 Simulated Conditions—from Westbound I-80 near the SR 65 Exit. 49

Key View 1c, Existing View and Alternative 3 Simulated Conditions—from Eastbound I-80 near the SR 65 Exit..... 55

Key View 3, Existing View and Alternatives 1, 2, and 3 Simulated Conditions—from Southbound SR 65 near the I-80 Exit. 60

Key View 4, Existing View and Alternatives 1, 2, and 3 Simulated Conditions—from Antelope Creek Trail south of the East Roseville Viaduct..... 64

LIST OF TABLES

Table 1. Comparing Numerical and Narrative Ratings of Visual Resource Change (RC)	37
Table 2. Comparing Numerical and Narrative Ratings of Viewer Response (VR)	37
Table 3. Visual Impact Ratings Using Viewer Response and Resource Change	38
Table 4. Viewer Response (VR) Numerical Rating for Alternative 1 – I-80 Corridor Visual Assessment Unit (Key Views 1a and 2a)	45
Table 5. Visual Character Numerical Evaluation for Alternative 1 – I-80 Corridor Visual Assessment Unit (Key Views 1a and 2a)	45
Table 6. Visual Quality Numerical Evaluation for Alternative 1 – I-80 Corridor Visual Assessment Unit (Key Views 1a and 2a)	46
Table 7. Visual Resource Change (RC) Numerical Rating for Alternative 1 – I-80 Corridor Visual Assessment Unit (Key Views 1a and 2a)	46
Table 8. Viewer Response (VR) Numerical Rating for Alternative 2 – I-80 Corridor Visual Assessment Unit (Key Views 1b and 2b)	49
Table 9. Visual Character Numerical Evaluation for Alternative 2 – I-80 Corridor Visual Assessment Unit (Key Views 1b and 2b)	50
Table 10. Visual Quality Numerical Evaluation for Alternative 2 – I-80 Corridor Visual Assessment Unit (Key Views 1b and 2b)	50
Table 11. Visual Resource Change (RC) Numerical Rating for Alternative 2 – I-80 Corridor Visual Assessment Unit (Key Views 1b and 2b)	51
Table 12. Viewer Response (VR) Numerical Rating for Alternative 3 – I-80 Corridor Visual Assessment Unit (Key Views 1c and 2c)	52
Table 13. Visual Character Numerical Evaluation for Alternative 3 – I-80 Corridor Visual Assessment Unit (Key Views 1c and 2c)	53
Table 14. Visual Quality Numerical Evaluation for Alternative 3 – I-80 Corridor Visual Assessment Unit (Key Views 1c and 2c)	53
Table 15. Visual Resource Change (RC) Numerical Rating for Alternative 3 – I-80 Corridor Visual Assessment Unit (Key Views 1c and 2c)	54
Table 16. Viewer Response (VR) Numerical Rating for Alternatives 1, 2, and 3 – SR 65 Corridor Visual Assessment Unit (Key View 3)	58
Table 17. Visual Character Numerical Evaluation for Alternatives 1, 2, and 3 – SR 65 Corridor Visual Assessment Unit (Key View 3)	58
Table 18. Visual Quality Numerical Evaluation for Alternatives 1, 2, and 3 – SR 65 Corridor Visual Assessment Unit (Key View 3)	59
Table 19. Visual Resource Change (RC) Numerical Rating for Alternatives 1, 2, and 3 – SR 65 Corridor Visual Assessment Unit (Key View 3)	59

Table 20. Viewer Response (VR) Numerical Rating for Alternatives 1, 2, and 3 – Open Space Visual Assessment Unit (Key View 4)..... 63

Table 21. Visual Character Numerical Evaluation for Alternatives 1, 2, and 3 – Open Space Visual Assessment Unit (Key View 4)..... 63

Table 22. Visual Quality Numerical Evaluation for Alternatives 1, 2, and 3 – Open Space Visual Assessment Unit (Key View 4)..... 65

Table 23. Visual Resource Change (RC) Numerical Rating for Alternatives 1, 2, and 3 – Open Space Visual Assessment Unit (Key View 4) 65

Table 24. Viewer Response (VR) Numerical Rating for Alternatives 1, 2, and 3 – Residential Visual Assessment Unit..... 68

Table 25. Visual Character Numerical Evaluation for Alternatives 1, 2, and 3 – Residential Visual Assessment Unit..... 68

Table 26. Visual Quality Numerical Evaluation for Alternatives 1, 2, and 3 – Residential Visual Assessment Unit..... 69

Table 27. Visual Resource Change (RC) Numerical Rating for Alternatives 1, 2, and 3 – Residential Visual Assessment Unit 69

Table 28. Viewer Response (VR) Numerical Rating for Alternatives 1, 2, and 3 73

Table 29. Visual Character Numerical Evaluation for Alternatives 1, 2, and 3 74

Table 30. Visual Quality Numerical Evaluation for Alternatives 1, 2, and 3 74

Table 31. Visual Resource Change (RC) Numerical Rating for Alternatives 1, 2, and 3 75

Table 32. Summary of Key View Narrative Ratings..... 77

Table 33. Summary of Avoidance, Minimization, and/or Mitigation Measures by Alternative 82

LIST OF ABBREVIATED TERMS

BP	business professional/commercial
Caltrans	California Department of Transportation
CC	Community commercial
CC&R	Conditions, Covenants and Restrictions
CEQA	California Environmental Quality Act
EN Line	eastbound to northbound connector ramp
HDR	high density residential
HOV	high-occupancy vehicle
I-5	Interstate 5
I-80	Interstate 80
kV	kilovolt
LI	Light Industrial
<i>MTP</i>	<i>Metropolitan Transportation Plan</i>
NEPA	National Environmental Policy Act
OS	open space
PCTPA	Placer County Transportation Planning Agency
PG&E	Pacific Gas and Electric Company
RTP	Regional Transportation Plan
SE Line	southbound to eastbound connector ramp
SMUD	Sacramento Municipal Utilities District
SR 65	State Route 65
SW Line	southbound to westbound connector ramp
UPR	Union Pacific Railroad
US 50	United States Route 50
VIA	visual impact assessment
VQC	Visual Quality Change
VR	Viewer Response
WAPA	Western Area Power Administration
WN Line	westbound to northbound connector ramp

VISUAL IMPACT ASSESSMENT

I-80/SR 65 Interchange Improvements Project

I. EXECUTIVE SUMMARY

The proposed project is located in Placer County in the Cities of Roseville and Rocklin at the Interstate 80/State Route 65 (I-80/SR 65) interchange. The project and its alternatives would upgrade the existing I-80/SR 65 interchange, upgrade existing high-occupancy vehicle (HOV) lanes, and widen the highways and associated ramps. Impacts from each alternative would be comparable. The three build alternatives would include similar widening of I-80, SR 65, and the East Roseville Viaduct; reconfigured, taller and more complex I-80/SR 65 connectors that are similar in configuration and height; similar HOV lanes and lane barriers; similar retaining wall structures; widened bridges over I-80 and on-ramps and off-ramps for I-80 and SR 65 that are similar; and associated vegetation removal that is similar. The primary differences between the three build alternatives is the removal of the existing Taylor Road ramps and creation of a Taylor Road connection that crosses under I-80 under Alternative 1; a slightly more complex exit system to access I-80/SR 65 connectors, modification of the existing Taylor Road ramps from I-80, under Alternative 2; and an exit system like Alternative 2 to access the I-80/SR 65 connectors and no Taylor Road connection under Alternative 3. The elements that would result in the greatest visual impacts would be the I-80/SR 65 connectors, widened East Roseville Viaduct, and vegetation removal. All of these changes would generally appear similar under all the build alternatives. Although changes to visual resources would range from low to moderate-low, viewer response to these changes would range from moderate-high to high, and the resulting visual impacts would range from moderate to moderate-high. Overall, all build alternatives would result in the same visual impacts. Mitigation measures include minimizing fugitive light during construction, limiting construction to the daytime and installing construction barriers near residences, applying minimum lighting standards, implementing wildflower seeding and landscaping, and incorporating project design aesthetics that would help to offset these visual impacts and improve project aesthetics.

II. PURPOSE OF STUDY

The purpose of this visual impact assessment (VIA) is to document potential visual impacts caused by the proposed project and propose measures to lessen any detrimental impacts that are identified. Visual impacts are demonstrated by identifying visual resources in the project area, measuring the amount of change that would occur as a result of the project, and predicting how the affected public would respond to or perceive those changes.

III. PROJECT DESCRIPTION

The California Department of Transportation (Caltrans), in cooperation with the Placer County Transportation Planning Agency (PCTPA), Placer County, and the Cities of Roseville, Rocklin, and Lincoln, proposes to improve the I-80/SR 65 interchange in Placer County, California, to reduce future traffic congestion, improve operations and safety, and comply with current Caltrans and local agency design standards.

The project is subject to state and federal environmental review requirements because the use of federal funds from the Federal Highway Administration is proposed. Accordingly, project documentation is being prepared in compliance with both the California Environmental Quality Act (CEQA) and the

National Environmental Policy Act (NEPA). Caltrans is the lead agency under NEPA and CEQA. This project is included in the *Placer County 2035 Regional Transportation Plan (RTP)* and the Sacramento Area Council of Governments (SACOG) *2035 Metropolitan Transportation Plan/ Sustainable Communities Strategy (MTP/SCS)*. Phase 1 of the project is programmed.

Location

The proposed project is located in Placer County in the cities of Roseville and Rocklin at the I-80/SR 65 interchange (Figure 1). The project limits consist of I-80 from the Douglas Boulevard interchange to the Rocklin Road interchange (post miles 1.9–6.1) and SR 65 from the I-80 separation to the Pleasant Grove Boulevard interchange (post miles R4.8–R7.3). The total length of the project is 2.5 miles along SR 65 and 4.2 miles along I-80. The project area also includes various local roads—specifically portions of Galleria Boulevard/Stanford Ranch Road, Pleasant Grove Boulevard, Eureka Road/Atlantic Street, East Roseville Parkway, and Taylor Road.

Purpose and Need

The project proposes to improve the I-80/SR 65 interchange in Placer County, California, in order to reduce future traffic congestion, improve operations and safety, and comply with current Caltrans and local agency design standards.

Termini (i.e., limits) for the project were developed through an iterative process involving engineering design and traffic operations analysis. Preliminary design concepts were tested with the traffic operations analysis model to evaluate how lane transitions and vehicle weaving influenced peak-hour conditions. Refinements were made to ensure that mainline lane balance was logical and that transitions did not cause unacceptable traffic operations such as extensive queuing or reduced speeds.

The purpose and objectives of the project are listed below.

- Upgrade the I-80/SR 65 interchange and adjacent transportation facilities to reduce no-build traffic congestion.
- Upgrade the I-80/SR 65 interchange and adjacent transportation facilities to comply with current Caltrans and local agency design standards for safer and more efficient traffic operations while maintaining and, if feasible, improving the current level of community access, at a minimum.
- Consider all travel modes and users in developing project alternatives.

The project is needed for the following reasons.

- Recurring morning and evening peak-period demand exceeds the current design capacity of the I-80/SR 65 interchange and adjacent transportation facilities, creating traffic operations and safety issues. These issues result in high delays, wasted fuel, and excessive air pollution and greenhouse gas emissions, all of which will be exacerbated by traffic from future population and employment growth.
- Interchange design features do not comply with current Caltrans design standards for safe and efficient traffic operations, and limit existing community access to nearby land uses.
- Travel choices are limited in the project area because the transportation network does not include facilities for all modes and users consistent with the complete streets policies of Caltrans and local agencies.

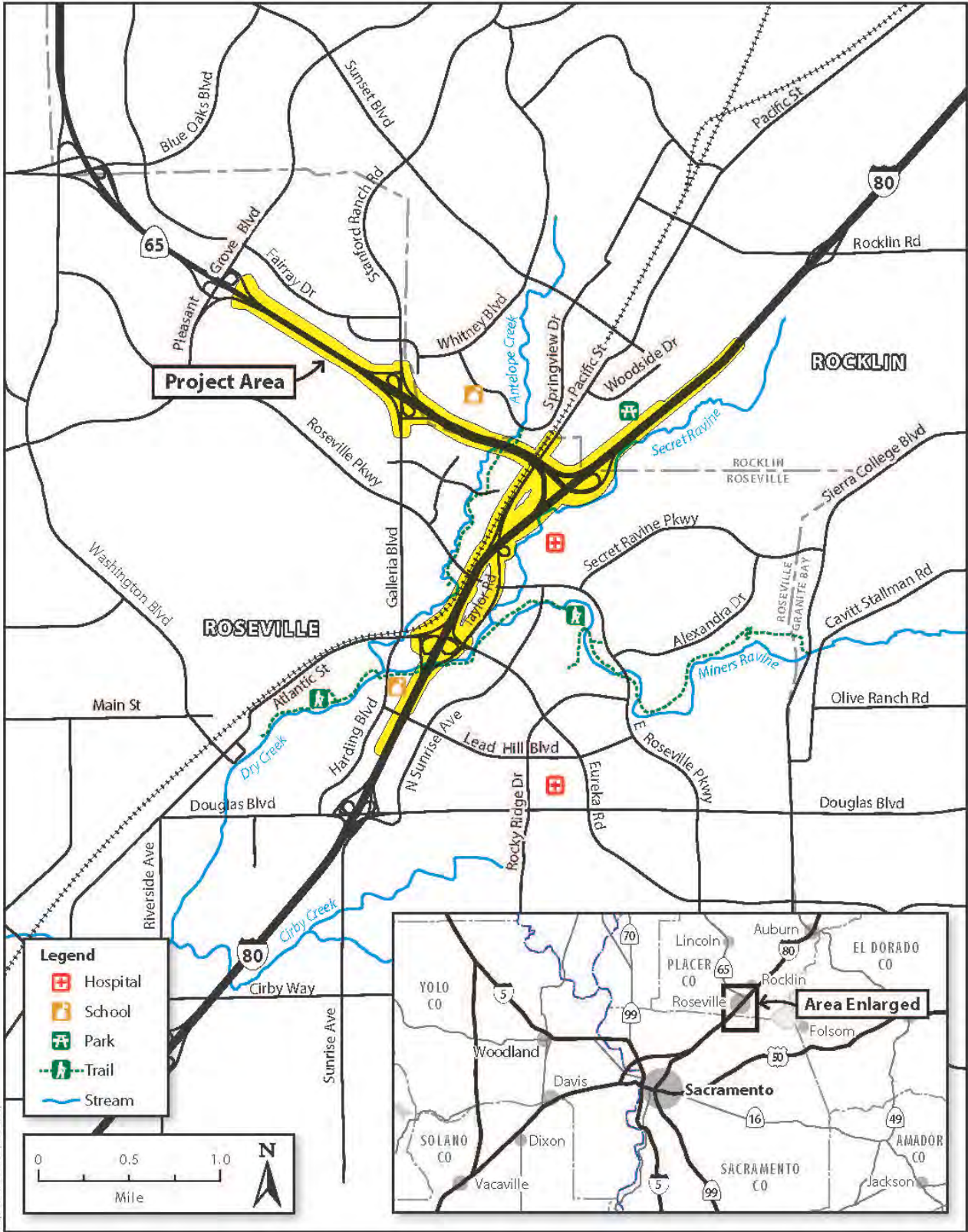


Figure 1: Project Location Project Alternatives

Alternatives

The proposed project is located in Placer County in the cities of Roseville and Rocklin at the I-80/SR 65 interchange. The project limits consist of I-80 from the Douglas Boulevard interchange to the Rocklin Road interchange (post miles 1.9–6.1) and SR 65 from the I-80 separation to the Pleasant Grove Boulevard interchange (post miles R4.8–R7.3). The existing I-80/SR 65 interchange is a type F-6 freeway-to-freeway interchange. The purpose of the project is to reduce future traffic congestion, improve operations and safety, and comply with current Caltrans and local agency design standards.

In addition to the No-Build (No-Project) alternative, the following build alternatives are under consideration and were designed to satisfy the purpose and need identified previously while avoiding or minimizing environmental impacts.

- Alternative 1—Taylor Road Full Access Interchange
- Alternative 2—Collector–Distributor (C-D) System Ramps
- Alternative 3—Taylor Road Interchange Eliminated

Alternatives 1, 2, and 3 propose to add capacity, a bi-directional high-occupancy vehicle (HOV) system, and high-speed connector ramps. Local and regional circulation and access would be improved, as would weaving conditions along I-80 between Eureka Road/Atlantic Street and Taylor Road, and along SR 65 between the I-80/SR 65 interchange and Galleria Boulevard/Stanford Ranch Road. Other improvements would include widening the East Roseville Viaduct, replacing the Taylor Road overcrossing, and realigning the existing eastbound I-80 to northbound SR 65 loop connector. See Figures 2 – 4 for a depiction of Alternatives 1, 2, and 3.

COMMON DESIGN FEATURES OF THE BUILD ALTERNATIVES

The build alternatives—Alternatives 1, 2, and 3—include common design features and have similar phasing approaches, staging, storage, and site access. Common design features of the build alternatives are listed below. For alignment and other improvement features that differ between alternatives, see the individual alternative descriptions in Section 1.4.1.2, “Unique Features of Build Alternatives.”

- I-80 would be widened to add one or two mixed-flow lanes and one or two auxiliary lanes in each direction of travel, depending on the location within the project limits. A retaining wall would be constructed in the eastbound direction between the Eureka Road interchange and the Roseville Parkway overcrossing. A tie-back wall would be constructed in the eastbound direction under the Roseville Parkway overcrossing.
- SR 65 would be widened to include one HOV lane, one additional mixed-flow lane, and one or two auxiliary lanes in each direction of travel, depending on the location within the project limits. Widening along SR 65 would occur on both the inside and outside of the existing pavement in both the northbound and southbound directions. The median would be fully paved and would include a concrete barrier. An additional concrete barrier would be added in the northbound direction between the HOV and general purpose lanes to prevent vehicle lane weaving between I-80 and the Galleria Boulevard/Stanford Ranch Road interchange. In the southbound direction, a 4-foot-wide pavement delineation soft barrier would separate the HOV and general purpose lanes to prohibit vehicle lane weaving between the Galleria Boulevard/Stanford Ranch Road on-ramp and the HOV direct connector ramp.
- The SR 65 mainline widening would require reconstruction of the ramp connections for all of the Galleria Boulevard/Stanford Ranch Road interchange ramps. The northbound Stanford Ranch Road slip off-ramp would be widened to two lanes to accommodate a future project at the ramp

terminus. A retaining wall would be required along northbound SR 65 under the Galleria Boulevard/Stanford Ranch Road overcrossing to accommodate the northbound Galleria Boulevard loop off-ramp improvements. The southbound Galleria Boulevard/Stanford Ranch Road on-ramp would be reconstructed to a two-lane ramp plus HOV preferential lane. The southbound Pleasant Grove Boulevard on-ramp also would be adjusted to accommodate the mainline widening. The existing wetland near the Pleasant Grove Boulevard on-ramp would not be affected and would be protected as an environmentally sensitive area during construction. The widening along SR 65 would occur within the existing right-of-way.

- The East Roseville Viaduct would be widened in the northbound and southbound directions, spanning Antelope Creek, Union Pacific Railroad (UPRR) tracks, and Taylor Road. The existing parallel structures would be widened on both sides and would require additional columns to support the widened structures. Bridge design requires that the widened portion of structures be configured similarly to the existing structure in order to provide consistent performance in regard to structure stiffness, deflection control, and seismic performance. Therefore, the additional columns would be placed parallel to the existing columns along the entire length of the viaduct. The viaduct widening in the northbound direction would shift the edge of deck approximately 33 feet closer to the Hearthstone apartment complex, and the widening in the southbound direction would shift the edge of deck approximately 10 feet closer to the Preserve at Creekside apartment complex.
- All proposed permanent columns, footings, and foundations for the East Roseville Viaduct would be located outside the ordinary high water mark of Antelope Creek, except at two locations. The two locations in Antelope Creek are on the upstream side of the northbound SR 65 widening. Structural stability of the bridge does not allow relocation of the columns.
- Although the viaduct structure is conventional, it is a large structure that will require a full construction season to construct. The proposed design of the structure is configured into smaller frames to allow it to be constructed in segments. Building the viaduct in segments allows the contractor to break up the work such that operations can be focused in smaller areas. For instance, the two columns in Antelope Creek can be constructed separately from other elements of the bridge to meet seasonal in-water restrictions. With appropriate construction staging, the portion of the viaduct over Antelope Creek would be constructed in approximately 4 months.
- Construction of the column foundations of the East Roseville Viaduct would use large-diameter (8- to 10-foot) steel-cased drilled shafts. The drilled shafts would minimize acoustic disturbance compared to a driven pile foundation. For the two columns affecting Antelope Creek, the steel casing would provide a construction zone similar to a cofferdam, but with less impact on the streambed because all construction activities can be confined inside of the 8- to 10-foot steel casing. The proposed column construction includes the following order of work.
 - Drill the shaft to the desired depth.
 - Auger out the material inside the steel casing and dispose of the materials per best management practices (BMPs).
 - Install reinforcing bar cage inside the casing, and pour the foundation and column. The foundation elevation would remain below the bottom elevation of the creek channel. Therefore, permanent impacts on the creek would consist of the viaduct column, which is smaller (approximately 5 by 8 feet) than the foundation diameter.
 - Remove the steel casing after foundation construction is complete, or leave it in place and cut-off below the mud line of Antelope Creek.

- The existing eastbound I-80 to northbound SR 65 loop connector would be removed and replaced with a high-speed three-lane flyover. The existing eastbound to northbound and southbound to eastbound connector structures over I-80 would be removed and replaced, including removal of the existing piers and abutments. Approach roadways would be removed, and the areas would be regraded.
- One lane of capacity would be added to each connector ramp by realigning the existing ramps. The westbound to northbound connector ramp (WN Line) would be constructed on fill, with a retaining wall along a portion of the outside shoulder; the southbound to eastbound (SE Line) and eastbound to northbound (EN Line) connector ramps would consist of a combination of fill, retaining walls, and structures.
- A direct connecting HOV ramp would be added to serve eastbound I-80 to northbound SR 65 and southbound SR 65 to westbound I-80. The HOV connector would be located in the I-80 median and would be retained by mechanically stabilized earth (MSE) walls before transitioning to a structure over westbound I-80 and other local and/or connector ramps. The HOV connector would transition back to fill with a cast-in-place retaining wall along the shoulder before conforming to the East Roseville Viaduct.
- The existing I-80/Taylor Road ramp connections (eastbound off-ramp and westbound on-ramp) would be modified. The existing access from I-80 to the eastbound Taylor Road off-ramp would be removed and either relocated or reconfigured, depending on the alternative.
- Taylor Road within the project limits would be improved, including replacement of the Taylor Road overcrossing. The structure would be replaced to accommodate the I-80 widening, with a profile correction until conforming to the existing road grade. The facility would be widened to accommodate anticipated traffic volumes, but the number of lanes would vary by alternative. Curb, gutter, and sidewalk would be constructed along the south side of Taylor Road. Driveways also would be modified to conform to the roadway widening.
- Other ramps and intersections of the I-80/Eureka Road/Atlantic Street interchange, the SR 65/Galleria Boulevard/Stanford Ranch Road interchange, and the SR 65/Pleasant Grove Boulevard interchange would be improved.
- The southbound SR 65 to eastbound I-80 connector would be realigned and widened to two lanes; it would begin on fill before transitioning to structure in order to span various roadways and a portion of Secret Ravine. An approximately 400-foot-long retaining wall would be required along the outside shoulder, prior to the structure, to separate the roadway from the southbound SR 65 to westbound I-80 connector. This connector would be the top (fourth) level of the interchange structures, reaching a maximum elevation of approximately 80 feet above the I-80 mainline, decreasing in elevation as it transitions to eastbound I-80. Structure columns would be placed such that they avoid the Secret Ravine floodway but they may be located within the designated 100-year floodplain. Once back within the existing right-of-way (approximate station 139+00), the SE connector would be constructed in a combination of cut and fill, requiring a retaining wall along the outside shoulder before merging with eastbound I-80.
- The SE connector is proposed to be constructed with cast-in-place concrete; this will require the use of temporary falsework and supports approximately every 60 feet, which would create both permanent and temporary disturbance areas in the Olympus Pointe Open Space Preserve.
- Although all three build alternatives do not directly affect the Stone House on parcel 015-162-007, the entire parcel may be acquired due to the percentage of the parcel that would be disturbed.

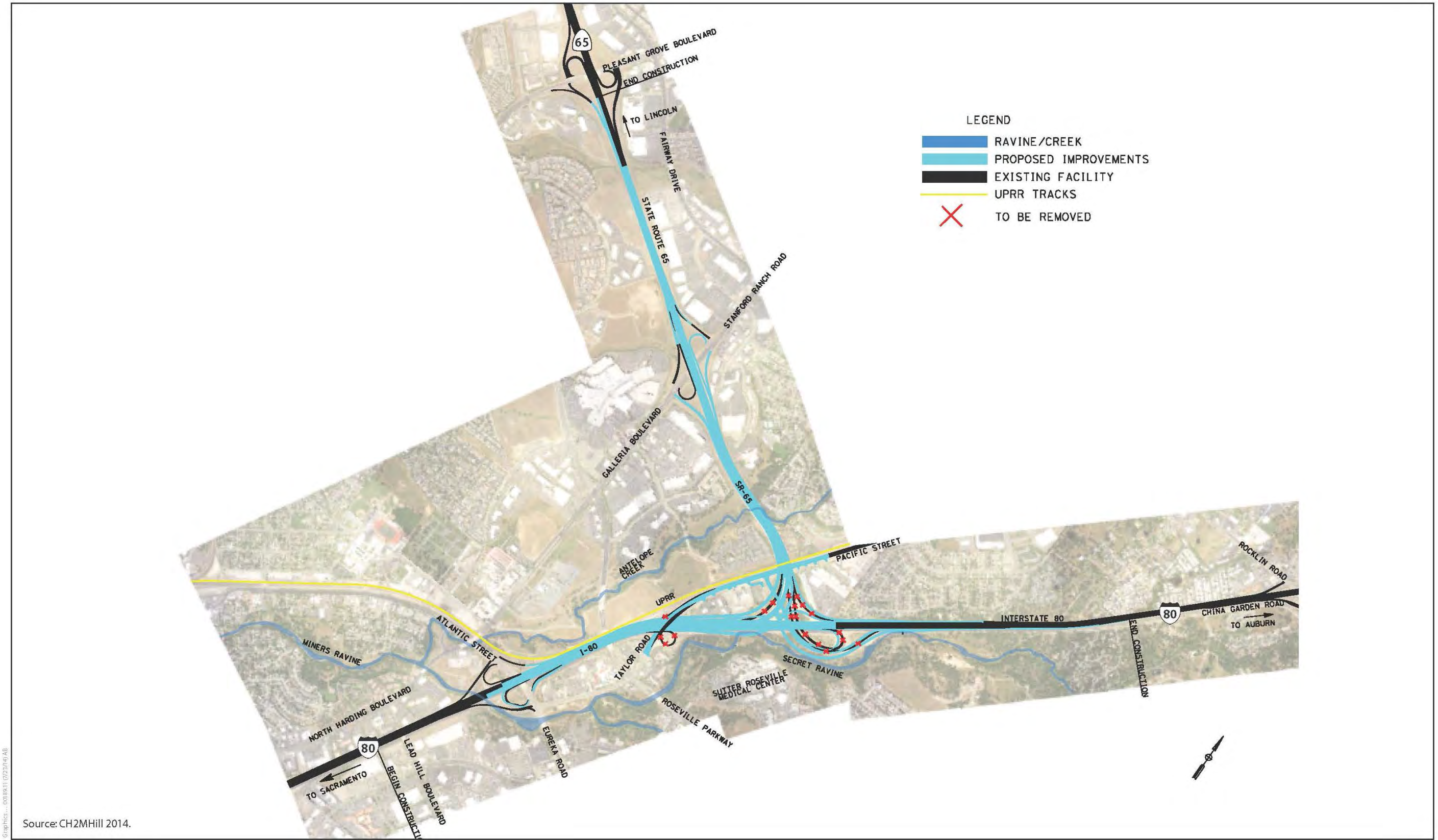
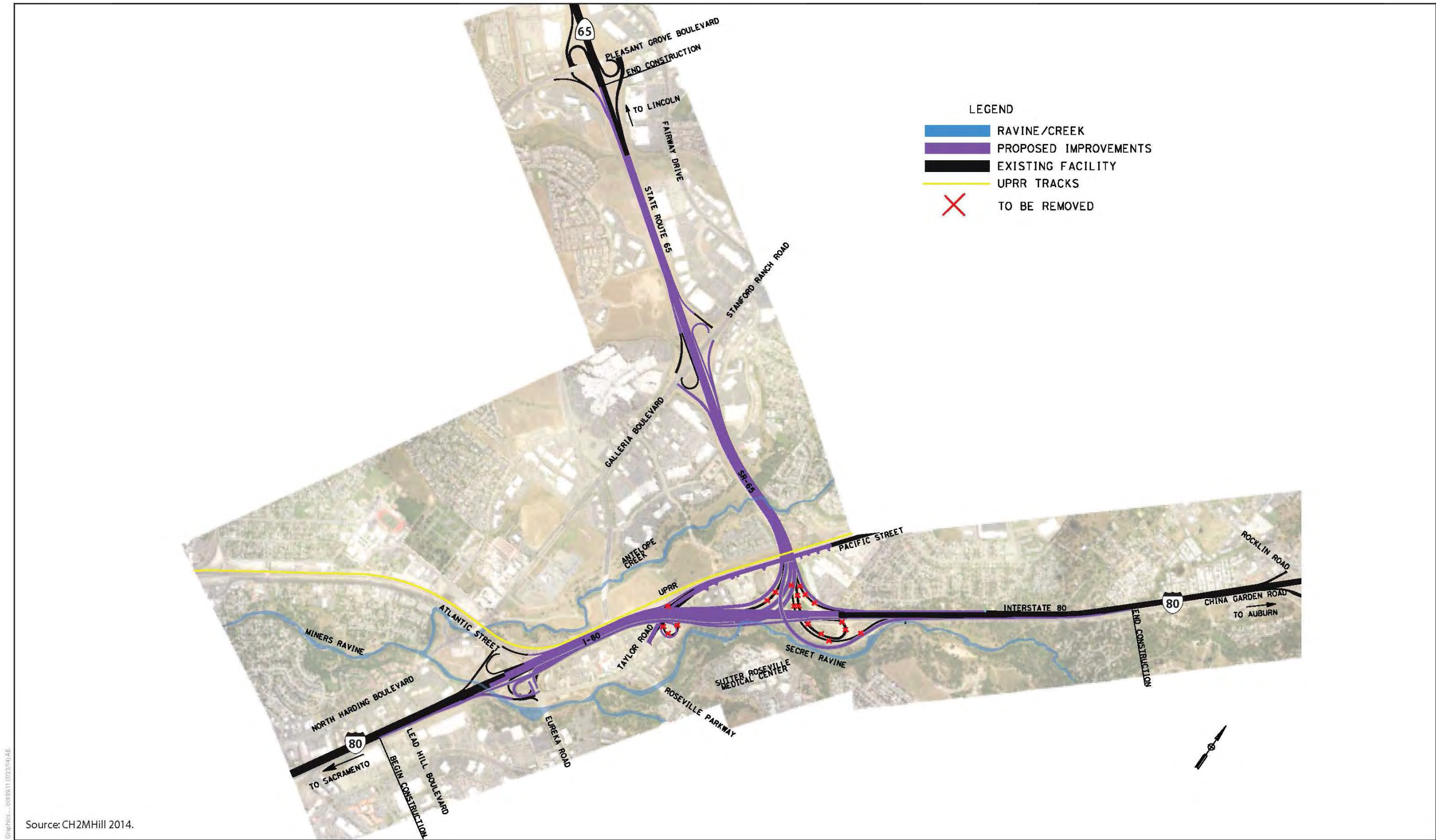
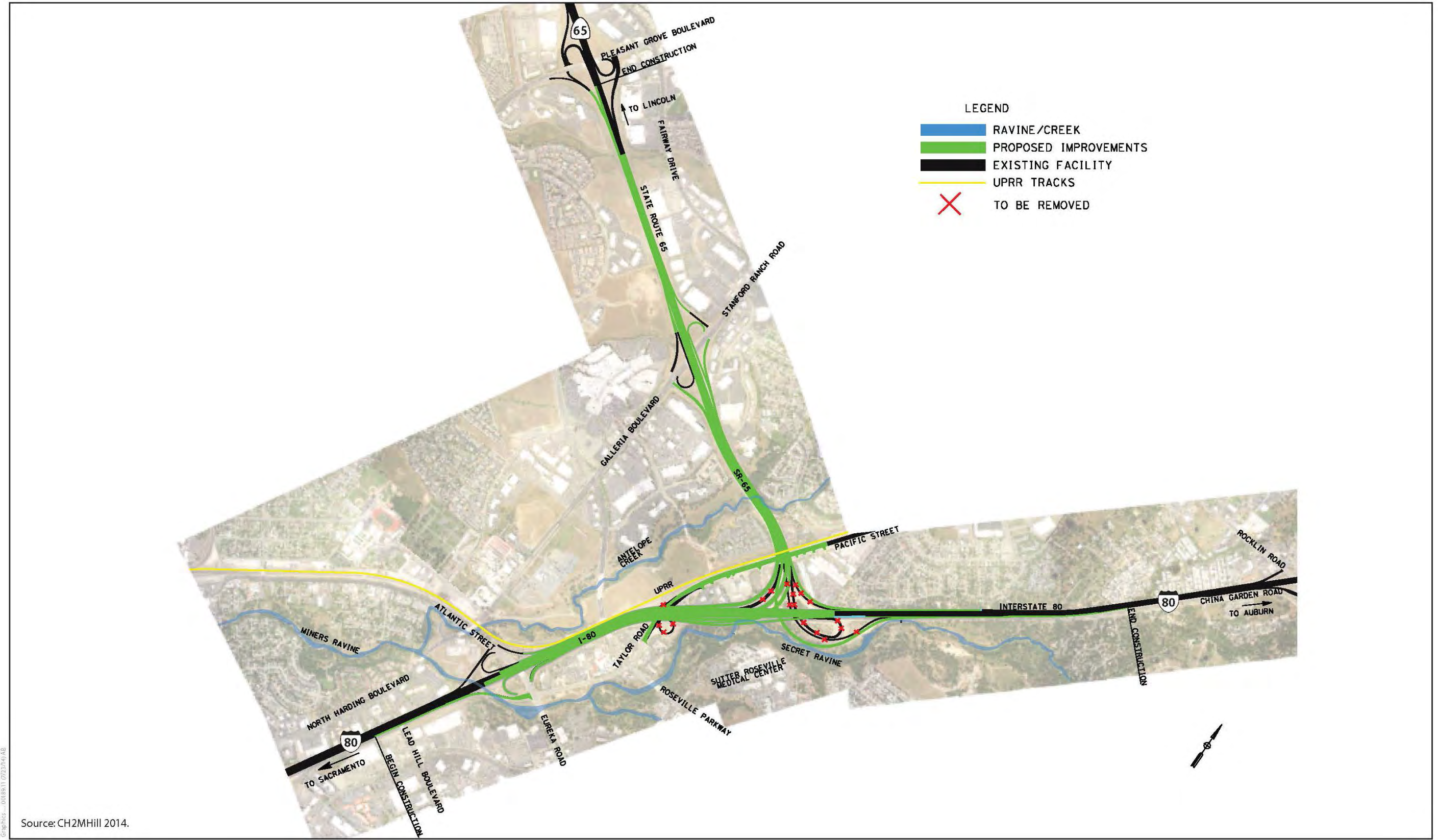


Figure 2: Alternative 1 – Taylor Road Full Access Interchange



Source: CH2MHill 2014.

Figure 3: Alternative 2 – Collector-Distributor System Ramps



Source: CH2MHill 2014.

Figure 4: Alternative 3 – Taylor Road Interchange Eliminated

- Additionally, the build alternatives would affect the Cattlemens restaurant parking lot. The area of impact varies by alternative.
- Construction is expected to require the use of earthmovers, bulldozers, paving machines, water trucks, dump trucks, concrete trucks, rollers, and pickup trucks.
- To avoid potential impacts on fish, pile driving would not be used as a construction method in or immediately adjacent to Secret Ravine, Miners Ravine, or Antelope Creek. No columns or other project elements would be permanently constructed in Secret Ravine or Miners Ravine. Up to two temporary crossings (e.g., Bailey bridges) of Secret Ravine, above the ordinary high water mark, and one temporary crossing of Antelope Creek may be necessary during construction.
- Temporary falsework platforms are required to construct the cast-in-place structures at Miners Ravine, Secret Ravine, and Antelope Creek. The platforms would be constructed outside the limits of the ordinary high water.
- Transportation system management (TSM) features identified in Alternative 4 would be incorporated into the build alternatives. (See Section 1.3.4.1, “Alternative 4—Transportation System Management.”) The following TSM features are common to each build alternative.
 - Freeway auxiliary lanes in both direction on SR 65 between I-80 and the Galleria Boulevard/Stanford Ranch Road interchange.
 - Ramp widening for storage and HOV bypass lane on the southbound Galleria Boulevard on-ramp.
 - Ramp widening for storage and HOV bypass lane on the northbound Galleria Boulevard on-ramp.
 - Ramp widening for storage and HOV bypass lane on the southbound Pleasant Grove Boulevard on-ramp

ALTERNATIVE 1—TAYLOR ROAD FULL ACCESS INTERCHANGE

This alternative would improve spacing and weaving movements between interchanges on I-80. The two existing Taylor Road interchange ramps would be relocated to the east and reconstructed in a Type L-1/L-12 interchange configuration, providing two additional ramp connections and improving access between the local streets and freeway system. The interchange would be positioned within the I-80/SR 65 interchange footprint and use portions of the existing eastbound I-80 to northbound SR 65 loop connector as well as the existing southbound SR 65 to eastbound I-80 connector. The existing Taylor Road interchange ramps would be removed, and the area would be regraded.

ALTERNATIVE 2—COLLECTOR-DISTRIBUTOR SYSTEM RAMPS

This alternative would improve spacing and weaving movements between interchanges on I-80 by collecting and redirecting eastbound ramp traffic onto a collector-distributor ramp system. The collector-distributor system would provide eastbound access to Taylor Road and from Eureka Road at the Atlantic Street/Eureka Road interchange and would restrict local traffic from leaving or entering I-80 mainline until after the critical weave area between Eureka Road and the I-80/SR 65 interchange. The two existing Taylor Road interchange ramps would remain in their current location but would be reconfigured to accommodate the surrounding improvements.

The proposed eastbound widening and retaining wall between the Eureka Road interchange and the Roseville Parkway overcrossing would require relocation of a 220 kilovolt (kV) Pacific Gas and Electric Company (PG&E) overhead transmission tower, the lines of which cross I-80 just south of Roseville Parkway. Alternative 2’s eastbound lanes and retaining wall would impact the billboard located in the

Golfland-Sunsplash parking lot. The relocation of the transmission tower and the billboard would require the Golfland-Sunsplash parking lot to be reconfigured.

ALTERNATIVE 3—TAYLOR ROAD INTERCHANGE ELIMINATED

Similar to Alternative 2, this alternative would improve spacing and weaving movements between interchanges on I-80 by collecting eastbound Eureka Road on-ramp traffic. Weaving on I-80 would be significantly improved because ramp traffic would be redirected to a ramp collector-distributor system and restricted from entering and exiting I-80 mainline until after the critical weave area between Eureka Road and the I-80/SR 65 interchange. Unique to Alternative 3, the two existing Taylor Road interchange ramps would be eliminated, and access to the Taylor Road area would be accommodated by the adjacent local interchanges at the Atlantic Street/Eureka Road, Rocklin Road, and Galleria Boulevard/Stanford Ranch Road interchanges. The connector ramps serving I-80 and SR 65 (SW, EN, SE, WN, and HOV) are the same between Alternatives 2 and 3.

The proposed eastbound widening and retaining wall between the Eureka Road interchange and the Roseville Parkway overcrossing would require relocation of a 220 kV PG&E overhead transmission tower, the lines of which cross I-80 just south of Roseville Parkway. Alternative 2's eastbound lanes and retaining wall would impact the billboard located in the Golfland Sunsplash parking lot. The relocation of the transmission tower and the billboard would require the Golfland Sunsplash parking lot to be reconfigured.

NO-BUILD ALTERNATIVE (NO-PROJECT)

This alternative would not make any improvements to the I-80/SR 65 interchange or adjacent transportation facilities to satisfy the purpose and need identified above. HOV and auxiliary lanes proposed on SR 65 north of Galleria Boulevard/Stanford Ranch Road, and other local improvements separately proposed and identified in the MTP/SCS would be implemented according to their proposed schedules.

Project Phasing

For constructability purposes and to ease maintenance of traffic during construction, the following phasing approach is proposed for the project and would be similar for all three build alternatives. Under current funding assumptions, project construction would begin in 2020 and would be divided into four major phases with nine subphases, ending in the year 2036. Phases are assumed to occur consecutively, with 2 years designated for each phase. Individual phases would consist of new road construction, road widening, and/or bridge/overpass construction.

Phase 1-SR 65

- Construct the inside widening of the East Roseville Viaduct and shift northbound traffic to the inside.
- Realign and widen the westbound I-80 to northbound SR 65 connector and widen westbound I-80 near the connector approach. Widen the outside northbound East Roseville Viaduct and perform northbound SR 65 widening. Modify the northbound Galleria Boulevard/Stanford Ranch Road ramps to accommodate the mainline widening, and construct the retaining wall under the Galleria Boulevard/Stanford Ranch Road overcrossing. Shift northbound traffic to the outside portion of the East Roseville Viaduct.
- Shift southbound traffic to the inside of the East Roseville Viaduct. Widen the outside southbound East Roseville Viaduct and perform southbound SR 65 mainline widening. Modify the southbound Galleria Boulevard/Stanford Ranch Road interchange ramps and southbound Pleasant Grove Boulevard on-ramp to accommodate the mainline widening.

Phase 2-Southbound to Eastbound and Eastbound to Northbound Connector Ramps

- Construct the southbound SR 65 to eastbound I-80 connector ramp. Shift traffic onto the new connector to allow removal of the existing southbound SR 65 to eastbound I-80 connector, including existing abutments, piers, and roadway approaches.
- Construct the eastbound I-80 to northbound SR 65 connector ramp with temporary conforms to eastbound I-80. Shift traffic onto the new flyover structure to allow removal or reconfiguration of the existing eastbound I-80 to northbound SR 65 loop connector. Remove the existing eastbound I-80 to northbound SR 65 structure, including existing abutments, columns, and roadway approaches.

Phase 3-I-80 Mainline

- Construct the western portion of the new Taylor Road overcrossing and temporary conforms along Taylor Road at each approach roadway as well as ramps to maintain traffic at all times on Taylor Road. Shift traffic onto the new portion of the bridge and remove the existing overcrossing. Construct the remaining portion of the Taylor Road overcrossing and open the entire bridge to traffic.
- Perform I-80 mainline widening and associated retaining walls. Realign and widen the southbound SR 65 to westbound I-80 connector ramp and modify the Eureka Road/Atlantic Street interchange ramps to accommodate mainline widening. Perform Taylor Road roadway improvements and modify Taylor Road ramps according to each particular alternative. Remove any existing pavement not used for the realignment and regrade the area.

Phase 4-HOV Connector

- Construct the HOV direct connector ramp and conform to future SR 65 Capacity and Operational Improvements Project.

Staging, Storage, and Proposed Access during Construction

The following staging, storage, and access are proposed for the project and would be similar for all three build alternatives.

Phase 1-SR 65

- During construction of Phase 1, areas along SR 65 within the Caltrans right-of-way would be used for staging and access.
- The East Roseville Viaduct widening is proposed to be constructed with cast-in-place concrete; this will require the use of temporary falsework. To minimize impacts on the streambed, temporary falsework construction platforms will be necessary. These platforms, which are spaced approximately every 60 feet, would be constructed to span across Antelope Creek so that construction can take place without any temporary construction features encroaching within the limits of ordinary high water.
- For the northbound viaduct widening, construction access is proposed from the Preserve at Creekside apartment complex at the terminus of Antelope Creek Drive, within a 50 foot-wide swath behind the apartment complex fence line, along the southbound East Roseville Viaduct, and from the Galleria Boulevard/Stanford Ranch Road interchange. To minimize impacts, construction vehicles would use a short section of the existing bike path adjacent to Antelope Creek. Where access is required across Antelope Creek to construct the temporary falsework and permanent columns, a temporary bridge (e.g., a Bailey bridge) is proposed. As with the

falsework platforms, the temporary bridge crossing has been sited to occur outside the limits of ordinary high water.

- For the southbound viaduct widening, temporary construction access is proposed from two directions: the Preserve at Creekside apartment complex from the south, and Caltrans right-of-way adjacent to SR 65 from the north. This will enable construction of the southbound viaduct without requiring a temporary crossing of Antelope Creek.
- Netting or other containment devices would be used to contain construction debris within the limits of the falsework and to prevent debris from falling into the ravine or onto the bike path.
- One of the proposed northbound viaduct columns would permanently impact a portion of the existing bike path. The extent of encroachment will require a permanent shift in the trail's alignment to avoid the column and meet current standards. Access to the bike path located under the viaduct would be maintained during construction of Phase 1. Only brief closures are anticipated to erect falsework and to shift the affected portion of trail. Falsework construction and trail closures would be scheduled to occur during times (e.g., nighttime and weekdays) that would minimize impacts on trail users, or temporary rerouting of the trail around the construction area would be provided. Appropriate traffic control measures (signs and flaggers) would be used as necessary to maintain the safety and flow of travel on the trail.
- For construction of the westbound I-80 to northbound SR 65 connector, the area would be accessed from the north side of I-80 (i.e., from the westbound outside shoulder or from Taylor Road and the interior footprint of the system interchange).

Phase 2-Southbound to Eastbound and Eastbound to Northbound Connector Ramps

- During construction of Phase 2, areas along SR 65, within the Caltrans right-of-way, would be used for staging and access.
- For viaduct construction, crews would be able to access the area via the Preserve at Creekside apartment complex at the terminus of Antelope Creek Drive.
- Access and staging for the southbound SR 65 to eastbound I-80 connector ramp would use the infield of the system interchange, accessed from both directions on I-80 or Taylor Road. Temporary access roads from the existing system ramps and under the structures may be required for construction of the bridge columns.
- Construction of the eastbound I-80 to northbound SR 65 connector ramp can be accessed from the existing eastbound Taylor Road loop off-ramp. The interior of the loop can be used for staging. The contractor may construct up to two temporary access bridges (e.g., Bailey bridges) across Secret Ravine, above the limits of ordinary high water, during construction of the bridge columns. Westbound I-80 and Taylor Road may be used to construct the portion of the EN connector located north of I-80.

Phase 3-I-80 Mainline

- During construction of Phase 3, the areas along SR 65 within the Caltrans right-of-way would be used for staging and access.
- Crews would be able to access the area adjacent to the Preserve at Creekside apartment complex at the terminus of Antelope Creek Drive.
- Construction of the I-80 mainline widening would use the infield areas for staging and would be accessed from the I-80 mainline or Taylor Road.

Phase 4-HOV Connector

- Construction of the HOV direct connector ramp would use the infield areas for staging and would be accessed from the I-80 mainline or Taylor Road.

Utility Relocations

Potential utility relocations are common to all three of the build alternatives. Utility impacts and/or relocations unique to each build alternative are described in Section 1.4.1.2, Unique Features of the Build Alternatives.

CONSOLIDATED COMMUNICATIONS (FORMERLY SUREWEST)

A Consolidated Communications line is located within the existing Taylor Road overcrossing. This facility would need to be relocated and replaced along the proposed Taylor Road alignment. There is also a Consolidated Communications line east of the I-80/SR 65 interchange that may be impacted by the mainline widening.

PLACER COUNTY WATER AGENCY

Underground water lines run along the existing Taylor Road. Depending on the depth of improvements on Taylor Road, underground water facilities may be avoided, may be protected in place, or may require relocation.

PACIFIC GAS AND ELECTRIC

Pacific Gas and Electric Company (PG&E) underground gas lines run along existing Taylor Road. Depending on the depth of improvements on Taylor Road, underground gas facilities may be avoided, protected in place, or may require relocation.

In addition to PG&E, the Sacramento Municipal Utilities District (SMUD) and Western Area Power Administration (WAPA) own and operate electric overhead utilities across I-80 that would require protection from equipment during construction.

IV. PROJECT LOCATION AND SETTING

The project location and setting provides the context for determining the type and severity of changes to the existing visual environment. The terms *visual character* and *visual quality* are defined below and are used to further describe the visual environment. The project setting is also referred to as the *corridor* or *project corridor* which is defined as the area of land that is visible from, adjacent to, and outside the highway right-of-way, and is determined by topography, vegetation, and viewing distance.

The proposed project is located between the Rocklin Road and Douglas Boulevard interchanges on I-80 and between the I-80 separation and Pleasant Grove Boulevard interchanges on SR 65 (Figure 1). The project region lies in the Sacramento Valley of northern California, in western Placer County and within the transition zone between the flat Sacramento Valley and the Sierra Nevada and Lake Tahoe region. The rolling Sierra Nevada foothills largely comprise the easternmost portion of the region. The westernmost portion of the region primarily consists of agricultural and suburban land uses, with the urban core of Sacramento located in the southwestern portion of the region. The landscape pattern is influenced by development sprawling from existing city cores and the major roadways, such as SR 65, SR 70, I-80, United States Route 50 (US 50), SR 99, and Interstate 5 (I-5). This portion of the county primarily supports agricultural, open space, and developed land uses that are located at the base of the foothills. Urban areas include Lincoln, Roseville, and Rocklin. In addition to numerous creeks and streams, major water bodies in the region that are outside of the immediate project vicinity include Dry Creek, Auburn Ravine, Pleasant Grove Creek, Folsom Lake, and the American River.

The project is located within the Cities of Roseville and Rocklin. The immediate project area is characterized by flat to gently sloping terrain. Development, transportation infrastructure, and mature trees and shrubs prevent distant views of the Sutter Buttes to the northwest and views of the Sierra Nevada to the east, except where Taylor Road crosses I-80 and views toward the Sierra Nevada are present. The land uses within the corridor are primarily commercial, business park, and industrial bordering I-80 and SR 65 intermixed with residential and open space and recreation land uses. Transportation facilities are a dominant visual feature in the project vicinity and include a number of highways and major roadways, including SR 65, I-80, Roseville Parkway, East Roseville Parkway, Eureka Road, Secret Ravine Parkway, Galleria Boulevard, Pleasant Grove Boulevard, Rocklin Road, and others. The project site is not located near a state scenic highway or other designated scenic corridor (Caltrans 2014a). Water bodies in the project vicinity include Antelope Creek, Secret Ravine, and Miners Ravine.

V. ASSESSMENT METHOD

This visual impact assessment generally follows the guidance outlined in the publication *Visual Impact Assessment for Highway Projects* published by the FHWA in March 1988.

The following steps were followed to assess the potential visual impacts of the proposed project.

- A. Define the project location and setting.
- B. Identify visual assessment units and key views.
- C. Analyze existing visual resources, resource change and viewer response.
- D. Depict (*or describe*) the visual appearance of project alternatives.
- E. Assess the visual impacts of project alternatives.
- F. Propose measures to offset visual impacts.

Using the concepts and terminology, described above, and the criteria for determining significance (see Section VII, “Visual Resources and Resource Change” below), analysis of the visual effects of the proposed project is based on the following methods.

- A. Observation from vantage points, including neighboring buildings, property, and roadways (conducted June 4, 2013).
- B. Photographic documentation of key views of and from the project site, as well as the regional visual context.
- C. A review of project construction drawings.
- D. A review of the project in regard to compliance with state and local ordinances and regulations and professional standards pertaining to visual quality.
- E. Evaluation and analysis of photographic simulations.

VI. VISUAL ASSESSMENT UNITS AND KEY VIEWS

The project corridor was divided into a series of “outdoor rooms” or *visual assessment units*. Each visual assessment unit has its own visual character and visual quality, and is typically defined by the limits of a particular viewshed.

For this analysis, the area surrounding the project area has been subdivided into five visual assessment units based on specific vantage points and differing sensitivities of those affected by the proposed project. The visual assessment units are shown in Figure 5 and are designated as I-80 Corridor, SR 65

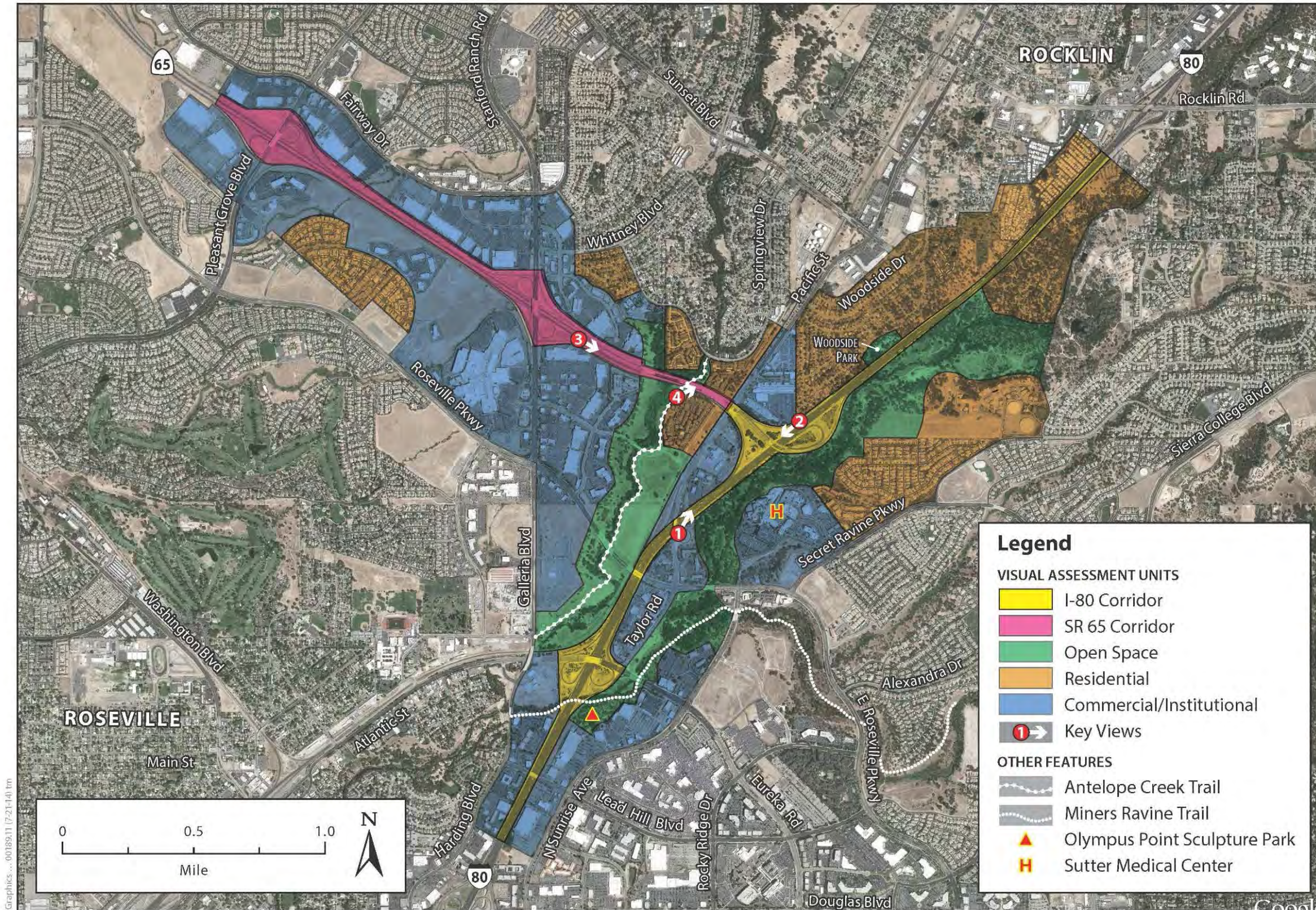


Figure 5: Visual Assessment Units

This map delineates five visual assessment units and key views that will be used to assess visual impacts that may be caused by the proposed project. Each visual assessment unit is differentiated from other units both by its dimensions and its visual resources.

Corridor, Open Space, Residential, and Commercial/Institutional. Key views (shown in Section IX, “Visual Impacts”) have been chosen for their representation of the visual assessment unit within which they are located and those viewers affected.

- **I-80 Corridor:** The existing I-80 corridor is generally at-grade, varies from three to five lanes in each direction with paved shoulders, and has a continuous concrete barrier in the median. Views of the bordering visual assessment units are present to the northwest and southeast when traveling either northeast or southwest (refer to Key View [KV] 1a through KV 1c and KV 2a through KV 2b in Section IX, “Visual Impacts”). Current lighting along the I-80 corridor is focused at the existing interchanges. Lighting is also associated with nearby businesses and residences, including interior and exterior building lighting and overhead lighting within parking lots. Views in this unit are mostly limited by the adjacent commercial and industrial development; soundwalls by residential areas; trees and shrubs associated with residential, open space, and commercial areas; and gently rolling terrain on either side of the corridor that acts to limit views to the immediate land uses bordering the highway corridor along this segment of I-80. Overcrossings also limit views down the corridor and often prevent views beyond the structure. Views in this visual assessment unit are largely of grassy terrain, trees and shrubs, buildings and signage associated with the adjacent commercial and industrial land uses to the northeast and southwest, soundwalls, highway signage, bridges crossing over I-80, and the immediate paved surface of the highway. Vegetation along the highway shoulders consists of unlandscaped grasslands.
- **SR 65 Corridor:** The existing SR 65 corridor is generally at-grade, with an unplanted median. Views are present to the northeast and southwest when traveling either northwest or southeast (refer to KV 3 in Section IX, “Visual Impacts”). Views in this unit are mostly limited to the foreground by the adjacent commercial and institutional (e.g., hospital/medical facilities, churches, educational facilities) development; trees, shrubs, and block wall constructed around businesses to buffer views of SR 65; and gently rolling terrain on either side of the corridor that acts to limit views to the foreground along this segment of SR 65. Current lighting along the SR 65 corridor is minimal and is focused at the existing interchanges and on overcrossings. Lighting also is associated with nearby businesses, including safety lighting affixed to buildings and overhead lighting within parking lots. Views in this visual assessment unit are largely of grassy terrain, trees and shrubs, buildings and signage associated with the adjacent commercial and industrial land uses to the northeast and southwest, highway signage, bridges crossing over SR 65, and the immediate paved surface of the highway. Vegetation alongside the highway consists of unlandscaped grasslands. The Galleria Boulevard and Pleasant Grove Boulevard overcrossings limit views to the foreground and middleground when roadway travelers are close to the overcrossings.
- **Open Space:** Open space corridors follow Dry Creek and Antelope Creek northwest of I-80, and Miners Ravine and Secret Ravine southeast of I-80. These open space and creek corridors support recreational uses that are accessed by the Antelope Creek and Miners Ravine Trails (refer to KV 4 in Section IX, “Visual Impacts”). The multi-use trails are accessible from the nearby Commercial/Industrial and Residential visual assessment units. The trails travel through rolling terrain and grasslands and oak woodlands associated with upland areas, and skirt the riparian corridors associated with waterways. These open space and recreational areas are used for biking, walking, running, sight-seeing, photography, and fishing. This unit and its associated trails travel under SR 65 and directly abut the I-80 right-of-way. The unit is not lit; however, aboveground utilities (e.g., wooden utility poles, steel transmission towers, and utility lines) are visible features crossing through this viewshed. In addition, the Union Pacific Railroad (UPRR) rail line is located north of I-80 and Taylor Road/Pacific Street. The rail line skirts the eastern edge of the portion of this unit containing the Antelope Creek Trail. Views within the unit include views of the natural landscape; the surrounding Commercial/Industrial and Residential visual assessment units; and roadway and freeway infrastructure such as paved surfaces, pier supports, and bridge decks. However, vegetation

within the open space and vegetation, fencing, and walls associated with residential and commercial landscaping limit some views within this unit.

- **Residential:** Suburban residential areas consist of multi- and single-family residential uses. Two-story, multi-family housing complexes are located on either side of SR 65, northwest of Taylor Road/Pacific Street, and along Gibson Drive between Roseville Parkway and SR 65. The multi-family developments on either side of SR 65 are located below the East Roseville Viaduct, which bridges Antelope Creek in this area. One- and two-story, single-family housing developments are located south of Whitney Boulevard and southwest of Springview Drive, southeast of Pacific Street, southeast of China Garden Road, and north of Secret Ravine Parkway and Scarborough Drive. Soundwalls separate housing developments located southeast of Pacific Street and southeast of China Garden Road from the I-80 corridor. Lighting within this visual assessment unit is concentrated within the residential developments and is associated with interior and exterior house lighting, landscape lighting, and street and traffic lighting. Views from the interior of residential developments are primarily limited to views of residential development, local roadways, and landscaping because existing buildings, fencing and walls, highway soundwalls, and landscaping block views of the project site. Views of the project site are most often available from the edge of the development closest to the project site, where second-story views are available. First-story views often are limited by fencing and walls, landscaping, soundwalls and, in some locations, vegetation associated with the Open Space visual assessment unit.
- **Commercial/Institutional:** Commercial uses in this unit include big-box retail, smaller businesses, office complexes, the Roseville Galleria Mall, restaurants, Roseville Golf and Sunsplash amusement park, and other commercial and retail uses. Institutional uses include hospital and medical facilities, churches, and educational facilities. Lighting within this unit includes safety lighting from the interior and affixed to the outside of buildings, lighting within parking lots and landscape lighting, and street and traffic lights. Aboveground utilities (e.g., roadway lights, traffic lights, wooden utility poles, steel transmission towers, and utility lines) are prominent features in the viewshed. This unit has the most direct views of the project site because it is the largest unit adjacent to the project site and also has the most unobstructed views of the I-80 and SR 65 corridors (e.g., from Cattlemens restaurant, the edges of Roseville Golf and Sunsplash amusement park, and businesses near the Pleasant Grove Boulevard/SR 65 interchange). However, as described for the SR 65 and I-80 Corridor visual assessment units, trees, shrubs, and block walls constructed around businesses buffer many views toward the project site from this unit, especially along SR 65. In addition, vegetation associated with the Open Space visual assessment unit and landscaping, such as in parking areas, sometimes blocks ground-level views of the project corridor, such as lower-level views from of the Sutter Medical Center. However, potential views of the project corridor would be available from the upper levels of buildings facing the project corridor, such as from the medical facility.

VII. VISUAL RESOURCES AND RESOURCE CHANGE

Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed project. Resource change is one of the two major variables in the equation that determine visual impacts (the other is *viewer response*, discussed below in Section VIII, “Viewers and Viewer Response”).

With an establishment of the baseline (existing) conditions, a proposed project or other change to the landscape can be systematically evaluated for its degree of impact. The degree of impact depends on both the magnitude of change in the visual resource (i.e., the visual character and quality) and on viewers’ responses to and concern about those changes. This general process is similar for all established federal

procedures of visual assessment (Smardon et al. 1986) and represents a suitable methodology of visual assessment for other projects and areas.

The approach for this visual assessment is adapted from the FHWA's visual impact assessment system (Federal Highway Administration 1988) in combination with other established visual assessment systems. The visual impact assessment process involves the identification of the following.

- Relevant policies and concerns for the protection of visual resources.
- Visual resources (i.e., the visual character and quality) of the region, the immediate project area, and the project site.
- Important viewing locations (e.g., roads) and the general visibility of the project area and site using descriptions and photographs.
- Viewer groups and their sensitivity.
- Potential impacts.

Visual Resources

Visual resources of the project setting are defined and identified below by assessing visual character and visual quality in the project corridor.

VISUAL CHARACTER

Visual character includes attributes such as form, line, color, and texture, and is used to describe, not evaluate; that is, these attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer response to that change. Changes in visual character can be quantified by identifying how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator. For this project, the following attributes were considered.

- **Form**—visual mass or shape.
- **Line**—edges or linear definition.
- **Color**—reflective brightness (light, dark) and hue (red, green).
- **Texture**—surface coarseness.
- **Dominance**—position, size, or contrast.
- **Scale**—apparent size as it relates to the surroundings.
- **Diversity**—a variety of visual patterns.
- **Continuity**—uninterrupted flow of form, line, color, or textural pattern.

The visual character of the proposed project will be somewhat incompatible with the existing visual character of the corridor. The visual character of the existing project site is mostly compatible with the surrounding pattern elements and pattern character.

The topography in the visual assessment units is flat to gently rolling along the highway corridors. Buildings associated with commercial and industrial areas are larger in form and scale, compared to those of single- and multi-family residential development. The existing SR 65 and I-80 corridors have a low to moderate profile within the landscape and include a number of interchanges and overcrossings that tend to draw attention toward transportation facilities. Although the overcrossings are visually apparent, they do not dominate viewsheds because they are in keeping with the many transportation facilities located within the

project vicinity. Vegetation in the visual assessment units varies from grasslands that grow to a low height and are not manicured, and trees and shrubs growing naturally along waterways, to more manicured lawns and trees and shrubs planted for landscaping that is associated with residential and business areas—giving an overall medium- to coarse-textured appearance in the project area. The color of vegetation generally changes seasonally in correspondence to the amount of rain in the region and ranges from tan grasses and green trees in summer and dryer, warmer months to green grass and dormant trees in winter and when cool air and rain are present. In addition, evergreen species provide greenery year-round. The visual assessment units associated with the project are fairly well-lit, except for open space areas.

VISUAL QUALITY

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the project corridor. Public attitudes validate the assessed level of quality and predict how changes to the project corridor can affect these attitudes. This process helps identify specific methods for addressing each visual impact that may occur as a result of the project. The three criteria for evaluating visual quality are defined below.

- **Vividness** is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.
- **Intactness** is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions.
- **Unity** is the extent to which all visual elements combine to form a coherent, harmonious visual pattern.

In addition to their use as descriptors, vividness, intactness, and unity are used more objectively as part of a rating system to assess a landscape’s visual quality. Visual quality is evaluated using the equation:

$$\text{Visual Quality (VQ)} = \frac{\text{Vividness (V)} + \text{Intactness (I)} + \text{Unity (U)}}{3}$$

3

Vividness, intactness, and unity are evaluated independently; each quality is assigned a rating from 0.0 – 7.0. On this scale, 0.0 = very low, 4.0 = average/moderate, and 7.0 = very high. The overall rating for visual quality follows the same 0.0 – 7.0 range. Ratings have been included in parentheses (e.g., VQ = 2.0) in the visual quality description of the visual assessment units.

The visual quality of the existing corridor will be altered by the proposed project. Section IX, “Visual Impacts” describes changes to the visual quality. The existing visual quality for each visual assessment unit is as follows.

- **I-80 Corridor:** The vividness of this visual assessment unit is moderately high (V = 5) because while highway infrastructure (e.g., sound walls, guardrails, overcrossings, bridges, light standards, and other barriers) interrupts views of the surrounding landscape, vegetation associated with nearby visual assessment units provides visual interest and improves the appearance of the right-of-way. Utilities and infrastructure detract from the corridor southwest of the Taylor Road overcrossing. The intactness and unity are moderate (I & U = 4.5) because although the portion of the unit northeast of the Taylor Road Overcrossing (the largest portion of the unit) contains highway infrastructure, soundwalls and vegetation block nearby development, and mature trees and shrubs dominate the corridor—softening the appearance of the corridor’s edges and reducing the apparent scale of overcrossings. However, the portion of the unit southwest of the Taylor Road Overcrossing contains many visual intrusions, such as a predominance of highway infrastructure combined with highway billboards and overhead utility lines crossing the highway, with poles and transmission towers bordering the unit. The resulting visual quality is moderate (VQ = 4.7).

- **SR 65 Corridor:** The vividness of this visual assessment unit is moderate ($V = 4$) because while the SR 65 corridor includes highway infrastructure (e.g., signage, guardrails, overcrossings, and light standards), it lacks concrete barriers, large soundwalls, and substantial development encroachments immediately adjacent to the highway (e.g., transmission lines, billboards, and commercial buildings directly abutting the right-of-way). The grassland area along the right-of-way and vegetative buffers associated with other visual assessment units provide an attractive view, but the vegetation is not sufficiently mature to obscure adjacent development along the highway corridor. The intactness and unity also are moderate ($I \ \& \ U = 4.5$); the moderate amount of highway infrastructure allows the highway to better blend with the surrounding grassland landscape, and utilities and billboards that could detract from the corridor are minimal. The resulting visual quality is moderate ($VQ = 4.3$).
- **Open Space:** The vividness of this visual assessment unit is high ($V = 6$) because the Open Space visual assessment unit provides visually appealing natural areas in an otherwise developed area. The intactness and unity are also moderately high ($I \ \& \ U = 5$) because while the open space area is not very disjointed and encroachments that could detract from the unit are minimal, pier supports and bridge decks are visible highway infrastructure elements where structures span waterways. In addition, the UPRR line, utility poles, steel transmission towers, and utility lines transect this unit. Mature vegetation obscures portions of nearby development and helps to reduce the apparent scale of highway infrastructure and visible development. The resulting visual quality is moderately high ($VQ = 5.3$).
- **Residential:** The vividness of this visual assessment unit is moderate ($V = 4$) because the various housing developments in this visual assessment unit are typical of other such development in the region. These areas have limited views of the I-80 and SR 65 corridors, open space areas, and other residential and commercial land uses in the area. The intactness and unity also are moderate ($I \ \& \ U = 4$) because the area is uniformly developed and well-manicured. The project is not a dominant visual element in the landscape. Development in the area is well designed. It lacks abrupt transitions between developed land uses, and large-scale utility corridors that often detract from views in the region are absent. The resulting visual quality is moderate ($VQ = 4$).
- **Commercial/Institutional:** The vividness of this visual assessment unit is moderate ($V = 3.5$) because the various commercial and institutional buildings in the unit that are typical of other such development in the region. They contain large-scale buildings and parking lots that often lack mature landscaping to offset the scale of development. These areas have limited views of the I-80 and SR 65 corridors and of other residential and commercial land uses in the area. They have views of the Open Space visual assessment unit. The intactness and unity are moderate ($I \ \& \ U = 4$) because development in the area is consistent and lacks abrupt transitions between developed land uses, and large-scale utility corridors that often detract from views in the region are minimal. The resulting visual quality is moderate ($VQ = 3.8$).

Resource Change

The proposed project would construct a larger, more complex interchange system with taller structures of varying heights where a smaller, less complex interchange system with overcrossings of uniform height presently exists. The highest degree of change would occur from introducing the taller system connector structures. Although overcrossings are already common visual elements in the landscape, most overcrossings in and near the project area are generally the same height. The roadway segments would require conversion of existing open space areas, especially near Secret Ravine, to accommodate piers and overhead bridge decks that would be visible—primarily within the I-80 Corridor, Open Space, and Commercial/Institutional visual

assessment units. In addition, vegetation removal would be required to accommodate the interchange and roadway widening. The resource change would range from low to moderate (refer to Tables 7, 11, 15, 19, 23, 27, and 31 in Section IX, “Visual Impacts”).

VIII. VIEWERS AND VIEWER RESPONSE

The population affected by the project is composed of *viewers*. Viewers are people whose views of the landscape may be altered by the proposed project—either because the landscape itself has changed or their perception of the landscape has changed.

Viewers, or more specifically the response viewers have to changes in their visual environment, are one of two variables that determine the extent of visual impacts that will be caused by the construction and operation of the proposed project. The other variable is the change to visual resources discussed earlier in Section VII, “Visual Resources and Resource Change.”

Types of Viewers

There are two major types of viewer groups for highway projects: highway neighbors and highway users. Each viewer group has its own particular level of *viewer exposure* and *viewer sensitivity*, resulting in distinct and predictable visual concerns for each group which help to predict their responses to visual changes.

HIGHWAY NEIGHBORS (Views to the Road)

Highway neighbors are people who have views *to* the road. They can be subdivided into different viewer groups by land use. For example, residential, commercial, industrial, retail, institutional, civic, educational, recreational, and agricultural land uses may generate highway neighbors or viewer groups with distinct reasons for being in the corridor and therefore having distinct responses to changes in visual resources. For this project, the following highway neighbors were considered.

- Residents within the Residential visual assessment unit.
- Workers and patrons within the Commercial/Institutional visual assessment unit.
- Recreationists within the Open Space visual assessment unit.
- Roadway users within Residential and Commercial/Institutional visual assessment units.

HIGHWAY USERS (Views from the Road)

Highway users are people who have views *from* the road. They can be subdivided into different viewer groups in two different ways—by mode of travel or by reason for travel. For example, subdividing highway users by mode of travel may yield pedestrians, bicyclists, transit riders, car drivers and passengers, and truck drivers. Dividing highway users or viewer groups by reason for travel creates categories like tourists, commuters, and haulers. It is also possible to use both mode and reason for travel simultaneously, creating a category like *bicycling tourists*, for example. For this project, the following highway users were considered within the SR 65 and I-80 Corridor visual assessment units.

- Recreational travelers
- Local commuters
- Haulers

Viewer Response

Viewer response is a measure or prediction of the viewer’s reaction to changes in the visual environment and has two dimensions as previously mentioned, viewer exposure and viewer sensitivity.

VIEWER EXPOSURE

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. *Location* relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more exposure. *Quantity* refers to how many people see the object. The more people who can see an object or the greater frequency an object is seen, the more exposure the object has to viewers. *Duration* refers to how long a viewer is able to keep an object in view. The longer an object can be kept in view, the more exposure. High viewer exposure helps predict that viewers will have a response to a visual change.

Roadway users within the I-80 Corridor represent the largest number of viewers who would come into direct visual contact with the proposed project. It is estimated that between 2,550 and 7,470 vehicles per hour travel in each direction on I-80 through the project area during peak hours.¹ Roadway users within the SR 65 Corridor represent the second largest number of viewers, with an estimate of between 1,150 and 4,360 vehicles per hour travelling in each direction on SR 65 through the project area during peak hours. Views of the interchange from SR 65 would only be apparent as drivers are about to enter the interchange because development, vegetation, and curvature of the road obscure views. However, many roadway users likely travel this route on a daily basis for work commutes. Roadway users' exposure would range from moderate-high to high based on traffic volumes.

Roadway neighbors constitute viewers who would have longer-term, stationary views (residents and businesses) and viewers who would have shorter-term, transient views (recreationists and roadway travelers on nearby local roadways) as they pass by the proposed project. Roadway neighbors' views of the project vary based on location within the landscape and distance from the project site. A limited amount of roadway neighbors have immediate and direct views of the project site, including stationary views from the edges of development that are directly adjacent to the project site and transient views by viewers approaching and directly adjacent to the project site. Most roadway neighbors do not have immediate and direct views of the project because views are limited by development, vegetation, and topography. More distant views are not available because of these intervening features. Residents would have high exposure, businesses would have moderate-high exposure, and transient roadway neighbors would have moderate exposure.

VIEWER SENSITIVITY

Viewer sensitivity is a measure of the viewer's recognition of a particular object. It has three attributes: activity, awareness, and local values. *Activity* relates to the preoccupation of viewers—are they preoccupied, thinking of something else, or are they truly engaged in observing their surroundings. The more they are actually observing their surroundings, the more sensitivity viewers will have of changes to visual resources. *Awareness* relates to the focus of view—the focus is wide and the view general or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change. *Local values* and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, state, or national designation, it is likely that viewers will be more sensitive to visible changes. High viewer sensitivity helps predict that viewers will have a high concern for any visual change.

The proposed project is located in an area that is established and primarily undergoes infill land development. However, all viewer groups are familiar with maintenance and construction activities occurring on local roadways within and in close proximity to the project site. Roadway users would have moderate to moderate-high sensitivity to visual changes resulting from the project. Although viewers would have direct visual contact with the project only while travelling through the area and views would be intermittent, many roadway users travel this route on a daily basis for work commutes and are familiar with the existing visual

¹ Refer to Figure 12 of the *Transportation Analysis Report* (Fehr & Peers 2014) for more information.

conditions. Roadway neighbors would have moderate-high to high sensitivity to visual changes resulting from the project because the neighbors that are adjacent to or in proximity to the project site have short- to long-term stationary and transient views of the SR 65 and I-80 corridors and the vegetation located adjacent to the right-of-way.

REGULATIONS

No roadways within or near the project area are designated in federal or state plans as a scenic highway or route worthy of protection for maintaining and enhancing scenic viewsheds (California Department of Transportation 2014a). The following local regulations apply.

City of Roseville

The following policies and objectives in the Roseville General Plan apply to visual resources in the project area.

General Plan

The *City of Roseville General Plan 2025* (City of Roseville 2013a) is a comprehensive document that details the City's strategy for land use and development and defines the city's environmental, social, and economic goals. The area surrounding the project area is a part of the Highland Reserve North, North Central Roseville, and Infill Specific Plans. The Infill Specific Plan area is regulated by the General Plan and zoning ordinances (Bitter pers. comm.)

Land Use Element

Community Form (G) Policy 1. Through both public and private efforts, develop clearly defined entries at major entrances into the City through the use of open space, landscaping, signage and other distinctive elements as a way of defining the City's boundaries and identity.

Community Form (DN) Policy 5. Encourage infill development and rehabilitation that:

- upgrades the quality and enhances the character of existing areas;
- enhances public transit use and pedestrian access;
- efficiently utilizes and does not overburden existing services and infrastructure; and
- results in land use patterns and densities that provide the opportunity for the construction of household types affordable to all income groups.

Community Form (DN) Policy 6. Promote active citizen involvement in defining, maintaining, and improving the character and identity of existing neighborhoods, including consideration of cultural and artistic enhancements.

Community Design Policy 1. Through the design review process, apply design standards that promote the use of high quality building materials, architectural and site designs, landscaping signage, and amenities.

Community Design Policy 3. Encourage designs that strike a balance between the incorporation of aesthetic and development requirements, and the economic considerations associated with development.

Community Design Policy 4. Promote flexibility in the design review process to achieve design objectives, and encourage projects with innovative, unique and creative architectural style and design.

Community Design Policy 6. Through the design review process, encourage site and building designs that are in scale and compatible with adjacent development with respect to height, bulk, form mass, and community character.

Community Design Policy 7. Encourage project designs that place a high priority and value on open space, and the preservation, enhancement and incorporation of natural resources and other features including consideration of topography, vegetation, wetlands, and water courses.

Community Design Policy 8. Encourage and promote the preservation of historic and/or unique, culturally and architecturally significant buildings, features and visual environments.

Community Design Policy 9. The location and preservation of native oak trees and oak woodlands shall be a primary factor in determining site design, building location, grading, construction and landscaping, and in establishing the character of projects through their use as a unifying element in both new and existing development.

Growth Management (G) Policy 9. Retain and enhance Roseville’s identity and character to ensure that Roseville, even as it grows, remains consistent with the Growth Management Visioning Committee’s Vision Statement.

Growth Management (G) Policy 10. Work aggressively to address traffic generated outside of Roseville by working in collaboration with neighboring jurisdictions, regional, state, and federal entities to ensure traffic through Roseville is mitigated by regional solutions. Ensure that transportation solutions are supported by land-use and design policies that promote walking, biking, and transit, consistent with the Growth Management Visioning Committee’s Vision Statement.

Growth Management Policy 10. In addition to being consistent with the other goals and policies of the General Plan, specific plans shall comply with the following:

- a. Provide a public focal point, community, and/or theme feature. These features shall be specific to each area and be designed to contribute to the promotion and enhancement of community character. A special feature may include, but is not limited to, a community plaza, central park, or some other type of gathering area; outdoor amphitheater; community garden; regional park with special facilities; sports complex; or cultural facilities.
- b. Provide entryways at entrances to the City in accordance with the Community-wide Design Guidelines. Where possible, the entryways shall take advantage of and incorporate existing natural resources into the entry treatment. The specific plans shall identify the location and treatment of the entryways, and shall consider the use of open space, oak regeneration areas, signage and/or special landscaping to create a visual edge or buffer that provides a strong definition to entryways into the City.
- c. The specific plan areas shall be planned and oriented to be an integral part of the City consistent with the policies of the Community Form Component of this element.
- d. Develop design guidelines, specifying screening and a transition between public utilities (e.g., substations, pump stations) and other uses, in conjunction with the public utility departments and agencies. In addition, development along power line and pipeline easements shall incorporate design treatment to insure compatibility and safety. Design guidelines and treatment may include minimum setbacks, building and landscape design standards and possible limitations on certain types of uses and activities.
- e. Preserve natural resource areas where they exist, and where feasible, along new roadways. Such roadways may create a public boundary between the resource area and other uses. The specific

plans shall identify locations and standards for the preservation of natural resources along roadways, and shall identify sources of financing for such road segments.

- f. The specific plans shall include a resource mitigation/banking plan to be developed in accordance with the provisions of the Open Space and Conservation Element.

Open Space and Conservation Element

Open Space System Policy 9. Where feasible, entryways into Roseville shall incorporate the preservation of natural resource areas, such as oak woodland, riparian and grassland areas as a way of defining the City's boundaries and identity.

Vegetation and Wildlife Policy 1. Incorporate existing trees into development projects, and where preservation is not feasible, continue to require mitigation for the loss of removed trees. Particular emphasis shall be placed on avoiding the removal of groupings or groves of trees.

Vegetation and Wildlife Policy 2. Preserve and rehabilitate continuous riparian corridors and adjacent habitat along the City's creeks and waterways.

Vegetation and Wildlife Policy 3. Require dedication of the 100-year flood plain or comparable mechanism to protect habitat and wildlife values in perpetuity.

Vegetation and Wildlife Policy 4. Require preservation of contiguous areas in excess of the 100-year flood plain as merited by special resources or circumstances. Special circumstances may include, but are not limited to, sensitive wildlife or vegetation, wetland habitat, oak woodland areas, grassland connections in association with other habitat areas, slope or topographical considerations, recreation opportunities, and maintenance access requirements.

Groundwater Recharge and Water Quality Policy 3. Ensure a buffer area between waterways and urban development to protect water quality and riparian areas.

Parks and Recreation Element

The Parks and Recreation element establishes that

“non-traditional park lands refer to open space areas such as vernal pool preserves, oak woodlands, watershed/riparian areas, and greenbelts. Vegetated areas also provide value in terms of counteracting the effects of climate change. These lands may be used as passive recreational areas for visual and aesthetic enjoyment. In addition, such areas may accommodate bikeway or other trail connections.”

The policies in the Parks and Recreation element provide for the continued maintenance of existing parks and open space areas, in addition to the establishment of new parks and open space areas.

Highland Reserve North Specific Plan

Community Commercial (CC) and Open Space (OS) land uses border SR 65 within the Highland Reserve North Specific Plan area. The Community Commercial land uses along SR 65 are intended to make use of being very visible from the highway and to provide a buffer between the highway and residential uses. The Open Space uses are intended to serve as buffers between other land uses and as view corridors. In addition to their wetland preservation and stormwater benefits, they provide additional urban tree canopy and a visual linkage between differing land uses. (City of Roseville 2007.)

North Central Roseville Specific Plan

Land uses within the North Central Specific Plan area are predominantly Community Commercial, Business Professional and Business Professional/Commercial (BP), Regional Commercial (RC), and Open Space

bordering SR 65 and Taylor Road. A small area of High Density Residential (HDR) is located on the corner of SR 65 and Taylor Road. (City of Roseville 2013b).

Land Use Element

The specific plan's Land Use element identifies that the plan area is a regional commercial core with high-intensity commercial, business, and light industrial land uses because of its high visibility from I-80 and SR 65. Residential land uses in this area are meant to be centered on these attributes. A goal of this specific plan is that:

“Plan Area will provide visual landmarks in the form of prominent buildings, formal landscape corridors along major arterial streets, and permanent views through open space corridors. These landmarks are intended to provide visual orientation within the community, and to provide an identity of the North Central Plan Area as a major entry to the City of Roseville.”

In addition, landscaping along major arterials is intended to “create a unique entry statement as one enters the City” (City of Roseville 2013b).

Land use patterns are also established based on *View Corridors and Urban Design Considerations*. Views of importance include long-range views to the Sierra Nevada, the Coast Ranges, the Sutter Buttes, and Mount Diablo; and short-range views to Diamond Oaks Golf Course and residential neighborhoods to the south in Roseville, and to the north in Rocklin. The Specific Plan identifies that “the location of land uses can serve to maintain certain view corridors to distant vistas, and to enhance the aesthetics of the urban environment. The arterial streets, notably Roseville Parkway and Highway 65, will maintain views to the Sierra Nevada and the Coast ranges.”

Community Form and Design Element

The Specific Plan's Community Form and Design element identifies the following objectives related to visual resources:

2. A built environment that minimizes disruption of existing natural features, and to the extent practicable, blends with and takes advantage of the natural topography.
5. High quality and aesthetically superior development that relates architectural style, landscaping, signage, lighting, circulation and street furniture to produce environments that are pleasing in form, scale, texture, color and variety
9. Interfaces between various uses which provide a visual break, yet allow ample opportunity for pedestrian cross access.

The following polices apply.

Project Site Design Policy 3.2.1.1. Each increment of a phased project shall be designed to be complete in its function, circulation, drainage, infrastructure, landscaping, and visual aspects.

Project Site Design Policy 3.2.1.7. Buildings, roadways, and other improvements shall conform with the natural topography and minimize grading where feasible. Finished slopes should taper to blend with existing on-site topography and contours on adjacent sites and roadways. Excessive cuts and fills shall be avoided.

Project Site Design Policy 3.2.1.8. Projects adjacent to open space areas and corridors should incorporate such corridors into project design.

Project Site Design Policy 3.2.1.9. Site design and architecture shall consider solar access, wind protection, shade, and seasonal considerations, to enhance the quality of outdoor space.

Streetscape Landscape Guidelines Objective 3.2.4. The major roadways, including Highway 65, Roseville Parkway, and Pleasant Grove Boulevard, will cross the lower watershed preserve areas at a number of points throughout the Plan Area. The wetland preserve areas cannot have non-indigenous landscaping introduced into them, and it is important to maintain the primary view sheds throughout the Plan Area. At these locations low level landscaping will be used to soften the short range, foreground views. Street trees will be used to frame the open space corridor views in the preserve areas, as illustrated in Figure 3-1, View Corridors Analysis. Landscaping the frontage and within the interchange rights-of-way for Highway 65 is an aesthetic consideration for the Plan Area. The Community Facilities District for the North Central Specific Plan Area has included funding for the landscaping of Caltrans right-of-way along Highway 65.

Streetscape Landscape Guidelines Policy 3.2.4.4. Landscaping shall include undulating irregular earth berms or other design features as a method of adding visual interest and providing sufficient soil for mature plant growth. The intent is to avoid an unbroken visual plane along the roadway corridors. Such berms may not interfere with traffic visibility or drainage to natural features.

Streetscape Landscape Guidelines Policy 3.2.4.6. The continuing availability of water for landscaping is a major concern to the City of Roseville. Landscaping materials shall be selected with consideration for water requirements over the lifetime of the plants. The use of materials with low water requirements, particularly plants that are considered drought tolerant, and the use of efficient irrigation systems is strongly recommended and may be required. The Landscape Design Guidelines shall address the long-term water demand for all plant materials and shall indicate the means of conserving water in the recommended plantings and irrigation.

Streetscape Landscape Guidelines Policy 3.2.4.7. All public uses shall be subject to the same landscape and design standards as adjacent private uses.

Landscaping Adjacent to Natural Open Space Areas Policy 3.2.5.3. Where feasible, the formal landscaping of adjacent land uses should provide a visual transition to the informal landscape character of the open space area. Landscaping adjacent to wetland preserves shall be typified by low shrubs and groundcover, with the exception of trees compatible with the street trees used in the adjacent streets or adjacent private landscaping. Landscaping adjacent to open space along Antelope Creek shall blend with the oak woodland by incorporating oaks and complementary species. A discussion of the potential landscape materials is presented in the Landscape Design Guidelines.

Landscaping Adjacent to Natural Open Space Areas Policy 3.2.5.4. Landscape materials within planting areas adjacent to the wetland preserve areas shall be non-invasive species compatible with the natural habitat of the preserve areas.

Landscaping Adjacent to Natural Open Space Areas Policy 3.2.5.5. Earth berms and/ or swales may be used to separate and delineate the natural open space from the formal urban landscaping in order to maintain the security and privacy of the adjacent land use. Visual and pedestrian connections between the use and the open space should be maintained where feasible and as mandated in the Use Specific Guidelines.

Landscaping Adjacent to Natural Open Space Areas Policy 3.2.5.6. The project developer, owners' associations and City shall take whatever steps are necessary to prohibit the disposal of lawn clippings, rubbish, or any other foreign material in open space areas. A landscape and lighting district will be established to maintain all open space areas.

Screening and Fencing Guidelines Policy 3.2.6.3. All screens, fencing, and retaining walls shall be compatible in material, color and texture with related buildings.

Screening and Fencing Guidelines Policy 3.2.6.5. Six foot (6') high masonry soundwalls will be provided between single family residential uses and arterial roadways. A six foot (6') high wood and pilaster fence will be provided between single family residential uses and residential Collectors A and B. Wrought iron and pilaster fencing may be substituted to preserve views if approved by the Commission. If a wrought iron fence is approved, Conditions, Covenants and Restrictions (CC&R's) for the subdivision shall include language prohibiting the modification or replacement of the fence which would create inconsistent treatment along a continuous section of fence. A six foot (6') high masonry sound wall will be provided between single family residential uses and all other collector roadways. Walls/ fences shall have consistent treatment along a given roadway and will include materials and designs which are visually attractive. Wall/ fence treatment will be described in detail in the Landscape Design Guidelines. Periodic breaks in the wall/ fence shall be provided to facilitate pedestrian access per the use specific guidelines.

Screening and Fencing Guidelines Policy 3.2.6.7. All utility lines and connections are to be placed underground. Transformers, terminal boxes, meters, fire risers, backflow preventers, and other similar facilities shall be screened to the extent practicable, while still maintaining minimum clear areas around the equipment as required by the utilities and state law.

Lighting Guidelines Policy 3.2.7.2. Project lighting shall not create glare for project occupants or neighboring properties.

Lighting Guidelines Policy 3.2.7.2. The design of exterior lighting shall, in all cases, consider the long-term energy demand of the lighting program.

Lighting Guidelines Policy 3.2.7.5. High pressure sodium vapor lights with cutoff-style fixtures shall be used on major arterial streets, collector streets in non-residential areas, in parking areas, and along public sidewalks adjacent to arterial streets to improve energy efficiency and reduce glare impacts.

Signage Policy 3.2.8. Signage design guidelines are incorporated in the North Central Roseville Specific Plan Sign Guidelines adopted as a Planned Sign Permit Program separately from this Specific Plan. All signs within individual projects shall be coordinated and shall be consistent with the Sign Guidelines.

Artwork Policy 3.2.10. The provision of fine artwork such as sculptures, murals, water elements, carvings, frescoes, mosaics, and mobiles is strongly encouraged. Such work should relate in terms of form and concept with the architecture and environment of the subject site. Outdoor artwork should be located to be visible to the public. Design of the artwork should be durable against vandalism and weather, and not require excessive maintenance. The artwork is to be considered a permanent asset to the property. Artwork is to be considered as part of the design review process for individual projects in accordance with applicable City ordinances.

Circulation Element

The Specific Plan's Circulation element identifies that, among other objectives, it will "furnish an aesthetic environment for public circulation." SR 65 is identified as being a key element in the city's circulation system and serves as a major entryway into Roseville. Antelope Creek bike trail is a Class I bike trail in the city.

Bikeways and Pedestrian Paths Policy 5.8.3.6. Pathways adjacent to watershed preserves shall be placed so as not to interfere with the natural hydrology of the wetland areas. Pathways should be located near the south or west edge of drainageways when possible so that landscaping from adjacent uses may provide intermittent shading. Connections across the watershed corridors shall be designed into the system. Specific design of the system may be subject to the provisions of the Corps of Engineers 404 permit.

Resources Management Element

The Specific Plan's Resources Management element identifies policies that must be followed, in addition to the City of Roseville Tree Preservation Ordinance, to protect oak woodlands because "it is the intent of the North Central Specific Plan to ensure that all project design, grading, construction and landscaping shall give the highest priority to the preservation of native oak trees. The location and preservation of native trees shall be a primary factor in site design." The following policies also apply.

Soil Protection Policy 6.3.1.2. Individual projects will be required to develop and implement a dust control plan in accordance with the guidelines established by the Placer County Air Pollution Control District. Grading and similar activities shall not be conducted during windy conditions.

Soil Protection Policy 6.3.1.3. Site grading for structures and streets shall preserve natural land forms to the maximum extent possible. Construction techniques including, but not limited to, stepped footings and retaining walls are encouraged as a means of preserving native topography. Split level dwellings and other flexible building designs which work with the natural topography shall be utilized.

Soil Protection Policy 6.3.1.4. Slopes shall be rounded and taper to blend with existing topography; contours on adjacent sites, and roadways. Steep slopes and large retaining walls should be avoided when feasible.

Soil Protection Policy 6.3.1.5. Grading shall minimize disruption to existing natural features such as trees and other vegetation, natural ground forms, water courses, and views.

Soil Protection Policy 6.3.1.6. Soil exposed during grading which will be left exposed and are not under active construction during the rainy season, assumed to occur between October 15 and March 15, shall be promptly replanted with native compatible, drought resistant vegetation.

Water Quality Policy 6.4.1.8. Any public works projects in the flood way, lower watershed, riparian, or woodland areas shall include a preservation and restoration plan to be approved by the Planning Commission and City Council.

City of Roseville Tree Preservation Ordinance

The 1996 City of Roseville Tree Preservation Ordinance identifies that "trees in the city enhance the natural scenic beauty, sustain long-term potential increase in property values, maintain original ecology, provide tempering of extreme temperatures, reduce soil erosion and increase the oxygen output of the area needed to combat air pollution" and has established the zoning ordinance for "controlling the removal of and preservation of trees within the city and to reforest our urban environment" (City of Roseville 1996). The Tree Preservation Ordinance provides standards for tree permits required for actions affecting protected native oak trees, measures to protect these trees, and in-kind replacement for removed trees.

City of Rocklin

The following Rocklin General Plan policies apply to visual resources in the project area.

General Plan

The *City of Rocklin General Plan* (City of Rocklin 2012) designates the area surrounding the project area as Business Professional (BP), Recreation-Conservation (R-C), Retail Commercial (RC), and Light Industrial (LI).

Land Use Element

Policy LU-4. Utilize techniques that minimize the adverse effects of light and glare on surrounding properties, and incorporate dark sky concepts to the extent practicable.

Open Space, Conservation, & Recreation Element

Policy OCR-14. Provide developed as well as undeveloped parkland, recognizing that certain unique open space attributes may be best preserved by retaining them in a natural condition.

Policy OCR-15. Look for opportunities to establish linear parklands and/or open space areas that link open space and outdoor recreation areas, providing passage for pedestrians, bicycles, and wildlife.

Policy OCR-16. Encourage the location of parks adjacent to open space corridors.

Policy OCR-27. Establish Class I bikeways where feasible along public roadways when roadways are adjacent to open space and parkland.

Policy OCR-42. Encourage projects to be designed in a manner that protects heritage oak trees

Policy OCR-43. Mitigate for removal of oak trees and impacts to oak woodlands in accordance with the City of Rocklin’s Oak Tree Preservation Ordinance, or for projects located in zones not directly addressed by the Oak Tree Preservation Ordinance mitigation measures, on a project-by-project basis through the planning review and entitlement process and other botanically unique vegetation designated to be retained.

Policy OCR-44. Support continued development of an urban forest within the City by incorporating appropriate tree species and implementing proper planting and maintenance practices within public rights-of-way and public and private development projects.

Policy OCR-55. Consider the visual qualities of development projects and project compatibility with surrounding areas, especially when projects are proposed in urbanizing areas abutting rural or semi-rural areas where significant natural resource values exist.

Policy OCR-57. Encourage urban design and form that conserves land and other resources.

Circulation Element

Policy C-24. Require landscaping and tree planting along major new streets, properties abutting highways/freeways and along existing streets as appropriate.

Policy C-25. Minimize the impact of road construction on the natural terrain and the character of existing neighborhoods.

Policy C-26. Minimize the impact of road construction on creek corridors and related floodplain and riparian areas.

Policy C-27. Design and phase construction of road improvements to minimize disruption to local residents and traffic, to the extent feasible.

Policy C-52. Require landscaping and tree planting along railroad right-of-way and along existing streets as appropriate.

Rocklin Oak Tree Preservation Ordinance

The City of Rocklin Oak Tree Preservation Ordinance identifies that oak trees “provide habitat for wildlife; they contribute to the city’s beauty and varied scenery; they provide shade in parks as well as in developed areas; and they enrich soils and protect watersheds and streams from erosion.” The ordinance intends to “address the decline of oak woodlands due to urbanization through a considered attempt to balance against the social benefits of private property ownership and development” and “implements a comprehensive design review process for new development, offers incentives for oak tree preservation, and provides feasible alternatives and options to removal where practicable” (City of Rocklin 2014).

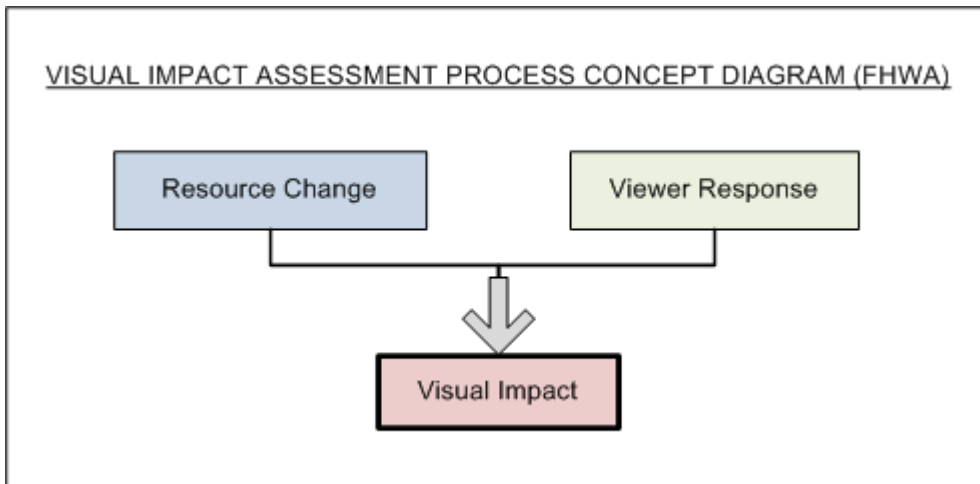
GROUP VIEWER RESPONSE

The narrative descriptions of viewer exposure and viewer sensitivity for each viewer group were merged to establish the overall viewer response of each group.

The roadway users viewer group has moderate-high to high exposure to the project site and moderate to moderate-high visual sensitivity; response of roadway users to the project would be moderate-high to high. The roadway neighbors viewer group has a range in exposure. Residents would have high exposure, businesses would have moderate-high exposure, and transient roadway neighbors would have moderate exposure. Roadway neighbors viewer have a moderate-high to high visual sensitivity; response of roadway neighbors to the project would be moderate-high to high. These responses would result from project features that would alter the visual character of the interchange; remove vegetation; and be visually inconsistent with other nearby overcrossings, interchanges, and roadways combined with viewer familiarity with the project site.

IX. VISUAL IMPACTS

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. These impacts can be beneficial or detrimental. Cumulative impacts and temporary impacts due to the contractor's operations are also considered. A generalized visual impact assessment process is illustrated in the following diagram.



Determining Resource Change

A numeric rating is used to determine the *visual resource change* and to compare the visual compatibility of project alternatives with the existing visual environment using a range from -7.0 to +7.0, where -7.0 is a highly negative change and +7.0 is a highly positive change. This is done for each key view. Visual resource change is determined using the following equation:

$$\text{Visual Resource Change (RC)} = \text{Visual Character Change (VC)} + \text{Visual Quality Change (VQ)}$$

2

To establish visual resource change, the change in visual character and visual quality must also first be determined for each key view. *Visual character change* evaluates the visual compatibility of each project alternative with the existing condition in terms of form, line, color, texture, dominance, scale, diversity, and

continuity using a range from -3.0 to +3.0, where -3.0 represents poor compatibility and +3.0 is good compatibility.

Visual quality is determined using the equation ($VQ = V+I+U/3$) described in Section VII, "Visual Resources and Resource Change." Visual quality change is determined using the following equation:

$$\text{Visual Quality Change (VQC)} = \text{Alternative VQ Rating} - \text{Existing VQ Rating}$$

If the average for "Alternative Rating" is less than the average for "Existing Rating," the VQC will be a negative change. If the average for "Alternative Rating" is greater than the average for "Existing Rating," the VQC will be a positive change.

Determining Viewer Response

Viewer response needs to be determined for each key viewpoint, considering viewer exposure and sensitivity, and using a range of 0.0 to 7.0, where a rating of 0.0 represents lower viewer response or exposure and 7.0, a higher viewer response or exposure. Visual response is determined using the following equation:

$$\text{Viewer Response (VR)} = \text{Viewer Exposure (E)} + \text{Viewer Sensitivity (S)}$$

2

Determining Visual Impacts

Table 1 provides a reference for comparing numerical ratings of visual resource change to the equivalent narrative ratings previously discussed in Section VII, "Visual Resources and Resource Change."

Table 1. Comparing Numerical and Narrative Ratings of Visual Resource Change (RC)															
	Negative Visual Resource Change								Positive Visual Resource Change						
(RC) Rating	-7.0	-6.0	-5.0	-4.0	-3.0	-2.0	-1.0	0	1.0	2.0	3.0	4.0	5.0	6.0	7.0
Equivalent Narrative Rating	High	High	Moderately High	Moderate	Moderate	Moderately Low	Low	No Change	Low	Moderately Low	Moderate	Moderate	Moderately High	High	High

Table 2 provides a reference for comparing numerical ratings of viewer response to the equivalent narrative ratings, to be used in Section IX, "Visual Impacts."

Table 2. Comparing Numerical and Narrative Ratings of Viewer Response (VR)								
Viewer Response Numerical Rating (VR)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0

Equivalent Viewer Response Narrative Rating	Low	Low	Moderate-Low	Moderate	Moderate	Moderate-High	High	High
--	-----	-----	--------------	----------	----------	---------------	------	------

Table 3 provides a reference for determining levels of visual impact by combining resource change and viewer response.

Table 3. Visual Impact Ratings Using Viewer Response and Resource Change						
		Viewer Response (VR)				
Resource Change (RC)		Low (L)	Moderate-Low (ML)	Moderate (M)	Moderate-High (MH)	High (H)
	Low (L)	L	ML	ML	M	M
	Moderate-Low (ML)	ML	ML	M	M	MH
	Moderate (M)	ML	M	M	MH	MH
	Moderate-High (MH)	M	M	MH	MH	H
	High (H)	M	MH	MH	H	H

Visual Impacts by Visual Assessment Unit and Alternative

Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a number of key views associated with visual assessment units that would most clearly demonstrate the change in the project’s visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the project considering exposure and sensitivity. In addition, these key views will be analyzed for each proposed alternative.

This VIA also considers the potential impacts of a No-Build Alternative. Under the No-Build Alternative, the project would not be constructed and there would be no visual impacts on the existing visual character, visual quality, or affected viewer groups. While maintenance activities such as repaving and restriping may occur in the foreseeable future along portions of the SR 65 and I-80 corridors, such maintenance activities are a part of the existing visual environment and they would not affect the existing visual character of the project area or negatively affect viewer groups. Such activities would be visible in the SR 65 and I-80 Corridor visual assessment units and would be visible to only a limited degree to viewers in the Open Space, Residential, and Commercial/Institutional visual assessment units.

The following section describes and illustrates visual impacts by visual assessment unit, compares existing conditions to the proposed alternatives, and includes the predicted viewer response.

I-80 CORRIDOR VISUAL ASSESSMENT UNIT

Alternatives 1, 2, and 3

The following construction and operation features would be the same or very similar under all three build alternatives.

Construction

Construction would take place between 2020 and 2034, with four major phases and nine sub-phases. Each sub-phase would last for 2 years, consecutively. Construction activities would introduce considerable heavy equipment and associated vehicles, including backhoes, compactors, tractors, cranes, and trucks, into the viewshed of highway users. Construction staging would occur within the right-of-way, including within ramp loops, which would be immediately visible to passing viewers. Construction signaling and signage would also be visible to direct traffic, signifying lane shifts and closures. The presence of construction activities and equipment would affect views of and from the project site during the construction period. This impact is considered adverse because, although each sub-phase would last for only 2 years, construction within the I-80 corridor would be perceived as a continual event occurring within the corridor. Highway users are transient and familiar with heavy equipment associated with other highway construction projects; nevertheless, the proposed project and its alternatives constitute a major highway construction project.

Evening and nighttime construction activities would require the use of extremely bright lights, which would negatively affect highway users and nighttime views of and from the work area. Implementation of Mitigation Measure 1, *Minimize Fugitive Light from Portable Sources Used for Construction* would reduce this impact by helping to prevent nuisance light spill during construction.

Operation

All project alternatives would include highway and structure widenings, introduction of retaining wall structures and lane barriers, HOV and ramp improvements, removal and replacement of I-80/SR 65 connectors, vegetation removal, and changes to private properties. All of these project components would be visible to highway users within the I-80 Corridor visual assessment unit.

Some changes associated with the project alternatives would not greatly alter the existing visual character of the I-80 corridor, such as ramp and intersection improvements and the Taylor Road overcrossing replacement. Ramp and intersection improvements at the I-80/Eureka Road/Atlantic Street interchange may include ramp metering, ramp widening for storage or HOV bypass lanes, and auxiliary lanes. The widening ramps would also appear similar to existing visual conditions and would not constitute a substantial visual change or greatly increase daytime glare. In addition, the Taylor Road overcrossing would be replaced with a wider structure over I-80 to accommodate additional lanes. While the overcrossing would be widened, all of the features associated with the proposed overcrossing are visual elements of the existing overcrossing. The widened overcrossing would not significantly alter the existing visual character of the project area as seen by highway users. All additions would be similar in appearance to existing facilities in the area.

The remaining project-related visual changes would result in a higher degree of change, especially when the sum of the parts are seen in unison with one another. One or two mixed-flow lanes and one or two auxiliary lanes in each direction of travel would be added to the existing corridor width, depending on the location within the I-80 corridor. A 2-foot-wide pavement delineation soft barrier would separate the eastbound and westbound HOV and general purpose lanes between the Eureka Road/Atlantic Street and the HOV direct connector ramp. The widened lanes, pavement, and striping associated with the project would slightly alter the existing visual character of the project area, as seen by highway users, by expanding the highway corridor and the amount of lanes visible, increasing the amount of paved surfaces, and slightly increasing daytime glare through of transformation of less reflective, vegetated surfaces to more reflective, paved surfaces. In addition, the widening would bring highway users nearer to adjacent land uses northwest of the corridor

between the Taylor Road overcrossing and the I-80/SR 65 interchange, bringing traffic closer to the Cattlemens restaurant, Enterprise Rent-A-Car, Taylor Road Self Storage, Preserve at Creekside Apartments, and Hearthstone Apartments.

Widening would also reduce the amount of grassland and vegetated areas within the right-of-way. Removal of mature trees and shrubs, including native oak trees and riparian vegetation along waterways, at the following locations would be visible to highway users.

- Evergreen and deciduous trees and shrubs within the Atlantic Street/Eureka Road interchange eastern loops and between the eastbound on-ramp at Eureka Road and adjacent commercial area,
- Evergreen and deciduous trees and shrubs within the Taylor Road interchange eastbound loop and near the Taylor Road overcrossing, along westbound I-80,
- Perimeter buffer plantings along the Cattlemens restaurant parking lot and between Roseville Yamaha and Enterprise Rent-A-Car,
- Oak woodland vegetation within the Open Space visual assessment unit along the eastern edge of the I-80 Corridor visual assessment unit, starting near the Sutter Medical Complex and extending up to the residential area located east of China Garden Road,
- Evergreen and deciduous trees and shrubs within the I-80 and SR 65 interchange medians along westbound I-80, and
- Evergreen and deciduous trees and shrubs north of the SR 65 on-ramp from westbound I-80 and south of the I-80 westbound on-ramp from SR 65.

Grassland areas along the right-of-way would also be reduced to accommodate highway widening. The visual character of the corridor would be negatively affected by removal of mature trees and shrubs (that are aesthetic resources) within ramp loops and on the edges of the right-of-way to accommodate widening and the new and reconfigured interchange ramps. Implementation of Mitigation Measures 2, *Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix* and 3, *Implement Interchange and Slope Landscaping and Visual Buffers* would reduce this impact by creating seasonal visual interest, relandscaping ramp loops, and replanting visual buffers between sensitive viewers.

All alternatives would add retaining wall structures and lane barriers that would increase the presence of such features in the I-80 Corridor visual assessment unit. The project includes a retaining wall between the eastbound Eureka Road/Atlantic Street interchange and the Roseville Parkway overcrossing, a cast-in-place retaining wall near the East Roseville Viaduct to support the direct connecting HOV ramp, a tie-back wall under the eastbound Roseville Parkway overcrossing, and a concrete barrier between the northbound HOV and general purpose lanes between I-80 and the Galleria Boulevard/Stanford Ranch Road interchange. Retaining walls are currently located in conjunction with corridor overcrossings and on eastbound I-80 near Roseville Golfland-Sunsplash. Retaining walls would create vertical surfaces that limit views and create a sense of enclosure, compared to locations that lack such features. Lane barriers, while shorter, would enclose HOV lanes, physically and visually channelizing and separating traffic. In addition, retaining walls have large vertical surfaces and barriers have smaller vertical surfaces that may result in increased reflective glare from sunlight during the day and from artificial light sources at night. These impacts are considered adverse because retaining walls prevent open views to the surrounding landscape, barriers create a channelized effect, and reflective glare could occur from those surfaces facing highway users. Implementation of Mitigation Measure 4, *Implement Project Design Aesthetics* would reduce this impact.

The most major visual changes associated with project alternatives in this visual assessment unit would be removal and modification of the existing I-80/SR 65 loop connectors and structures over I-80. Changes to the

I-80/Taylor Road ramp connections are discussed by alternative below. A three-lane flyover structure would be added to accommodate traffic for eastbound I-80 to northbound SR 65. In addition, a direct connecting HOV ramp in the I-80 median, built on mechanically stabilized earth walls that transitions to a structure and then to a cast-in-place retaining wall near the East Roseville Viaduct, would be added to serve traffic in both directions. The existing I-80 overcrossing has two parallel structures that appear to be one span until highways users pass under and can see the gap. The existing overcrossing has an approximately 18-foot clearance over I-80 and is approximately 26-feet tall at the top of the side barriers. In the reconfigured system of connectors, three to four aerial structures would cross over I-80 and other connector ramps would be at this location, depending on the alternative. The tallest of the reconfigured structures would be approximately 71 feet high at the top of the structure, when measured from the existing I-80 highway grade, making the reconfigured structure 45 feet taller than the existing structures. In addition, the connectors would require fill and mounding to provide bridge clearance over other connector ramps. This would create new landforms that would obscure views beyond only to a small degree, in passing, and would alter the existing visual character. The bridge materials would be visually similar to the existing structures, but the visual prominence of the connectors would be greatly enhanced due to the amount of reconfigured connectors introduced into the viewshed and their increased height. Implementation of Mitigation Measure 4, *Implement Project Design Aesthetics* would reduce visual impacts associated with the connectors.

Alternatives would require the relocation of existing lights to accommodate lane widening and ramp improvements. New light coming from ramp metering would add an inconsequential amount of light to the project area when meters are in use. However, new lights associated with reconfigured connectors would be at a higher elevation and have the potential to make lighting more prominent, if not properly designed. Implementation of Mitigation Measure 5, *Apply Minimum Lighting Standards* would reduce this impact.

Alternative 1

Construction

Construction impacts under Alternative 1 would be the same as described above for “Alternatives 1, 2, and 3.” Compared to Alternatives 2 and 3, this alternative would result in slightly less vegetation removal at the Atlantic Street/Eureka Road interchange and adjacent commercial area, within the Taylor Road interchange loops, and within the Open Space visual assessment unit near the Sutter Medical Complex. However, Alternative 1 would entail slightly more vegetation removal than Alternatives 2 and 3 within the Open Space visual assessment unit along the eastern edge of the I-80 Corridor visual assessment unit, starting near the eastbound I-80 on-ramp from SR 65 and extending up to the residential area located east of China Garden Road. The vegetation removal associated with the plantings near Cattlemens restaurant, Roseville Yamaha, and Enterprise Rent-A-Car and within the I-80 and SR 65 interchange western ramps would be the greatest under Alternative 1. The existing westbound Taylor Road on-ramp would also be relocated, but this would likely not affect vegetation. In addition, an undercrossing would be constructed under I-80 to accommodate the Taylor Road connection. This would result in slightly more visible construction activities from earthwork and bridge construction at this location along I-80.

Operation

Operational impacts under Alternative 1 would be the same as described above for “Alternatives 1, 2, and 3.” The Taylor Road on-ramp would be relocated, regraded, and seeded as seen in KV 1a, Simulated Conditions. This would appear to be a natural landform, reducing roadway infrastructure at this location, and creating a new open space area in the foreground of views from the Taylor Road Overcrossing and eastbound I-80. The greatest visual impacts within this visual assessment unit would be seen as highway users approach the I-80/SR 65 interchange. As seen in KV 1a, Simulated Conditions, the project would result in a complex connector system that would require fill and mounding to provide bridge clearance over I-80; reconfigured,

taller structures; and vegetation removal. The additional lanes would create a wider highway corridor compared to existing conditions, and the removal of vegetation would make the reconfigured ramps and connectors much more visually apparent compared to existing conditions.

As seen in KV 2a, Simulated Conditions, the project would create a wider highway corridor compared to existing conditions and would require removal of existing vegetation and regrading within the interchange medians northwest of I-80 to accommodate the new Taylor Road off-ramp. This would make the new support piers and elevated roadways of the proposed connector system more visually apparent within the landscape and would increase the amount of visible transportation infrastructure. The HOV direct connector from I-80 to SR 65 would be located in the middle of I-80 and would obscure views of the I-80 corridor beyond; currently, views down the corridor are not obscured until the Taylor Road Overcrossing. Many of the reconfigured connectors would be of similar height to the existing SR 65 bridge over I-80, but the reconfigured SR 65 connector to eastbound I-80 would be much taller than the existing structures.



Key View 1a, Existing View and Alternative 1 Simulated Conditions—from Eastbound I-80 near the SR 65 Exit.



Key View 2a, Existing View and Alternative 1 Simulated Conditions—from Westbound I-80 near the SR 65 Exit.

Viewer Response

Table 4 summarizes viewer exposure and viewer sensitivity ratings, and averages these viewer response ratings for the key view noted. Viewer response of highway users would be high (KV 1a) and moderate-high (KV 2a). Viewers within the I-80 Corridor visual assessment unit have the greatest exposure to major changes associated with the project area. Although they would come in direct visual contact with the project only while travelling through the area and views would be intermittent, many roadway users travel this route on a daily basis for work commutes and are familiar with the existing visual conditions. The modified interchange, roadway widening, and associated vegetation removal would alter the existing visual character of the project area, and highway users would likely view these changes negatively.

Table 4. Viewer Response (VR) Numerical Rating for Alternative 1 – I-80 Corridor Visual Assessment Unit (Key Views 1a and 2a)		
Key View	1a	2a
Exposure (E) rating	6	6
Sensitivity (S) rating	5	4
VR = (E+S)/2	5.5	5

Resource Change

Construction

Construction would affect the existing visual quality because it would occur within the I-80 Corridor visual assessment unit for an extended period of time and would require removal of some native trees, shrubs, and other vegetation that provide aesthetic qualities along the corridor. When combined with viewer response, construction would result in a resource change to this visual assessment unit that is moderate-low. The resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate to moderate-high.

Operation

The vividness of the I-80 Corridor visual assessment unit would be substantially affected by the proposed project, and the rating would be reduced to from moderate-high to moderate-low (KV 1a and KV 2a). The intactness and unity would also be reduced from moderate-high to low (KV 1a) to moderate-low (KV 2a) because the reconfigured I-80/SR 65 connectors would alter the appearance of the highway corridor and introduce substantial anthropogenic features—primarily associated with the connectors—that would segment the landscape. The overall visual quality would be reduced from moderate-high to low (KV 1a) to moderate-low (KV 2a) (refer to Table 6). Operation would result in a resource change to this visual assessment unit that is moderate-low (KV 1a and KV 2a) (refer to Table 7). When combined with viewer response, the resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate (KV 2a) to moderate-high (KV 1a).

Table 5 provides the average resource change (i.e., compatibility between the existing conditions and Alternative 1) for visual character for all the attributes previously identified (e.g., form, line, color, and texture) for KV 1a and KV 2a.

Table 5. Visual Character Numerical Evaluation for Alternative 1 – I-80 Corridor Visual Assessment Unit (Key Views 1a and 2a)	
Key View	Visual Character (Compatibility) Change (VC) =
1a	-2
2a	-2

Table 6 provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between existing conditions and Alternative 1 for KV 1a and KV 2a.

Table 6. Visual Quality Numerical Evaluation for Alternative 1 – I-80 Corridor Visual Assessment Unit (Key Views 1a and 2a)						
Key View		Vividness (V)	Intactness (I)	Unity (U)	Visual Quality (VQ)	Visual Quality Change (VQC) =
1a	Alternative Rating	3	2	2	2.3	-2.3
	Existing Rating	5	4.5	4.5	4.7	
2a	Alternative Rating	2.5	2.5	3	2.7	-2
	Existing Rating	5	4.5	4.5	4.7	

Table 7 summarizes visual character and visual quality changes under Alternative 1, and averages these resources changes for KV 1a and KV 2a.

Table 7. Visual Resource Change (RC) Numerical Rating for Alternative 1 – I-80 Corridor Visual Assessment Unit (Key Views 1a and 2a)		
Key View	1a	2a
Visual character (VC) rating	-2	-2
Visual quality change (VQC) rating	-2.3	-2
RC = (VC+VQ)/2	-2.2	-2

Alternative 2

Construction

Construction impacts under Alternative 2 would be the same as described above for “Alternatives 1, 2, and 3.” Compared to Alternatives 1 and 3, this alternative would result in slightly more vegetation removal at the Atlantic Street/Eureka Road interchange, along Miners Ravine, and the adjacent commercial area; within the Taylor Road interchange ramps; and within the Open Space visual assessment unit near the Sutter Medical Complex. An additional bridge would be constructed across Miners Ravine near the Atlantic Street/Eureka Road interchange, and between the eastbound I-80 corridor and the Atlantic Street/Eureka Road off-ramp. Alternative 2 would require more construction and vegetation removal at this location. Compared to Alternative 1, slightly less vegetation removal would be required within the Open Space visual assessment unit along the eastern edge of the I-80 corridor, starting near the eastbound I-80 on-ramp from SR 65 and extending up to the residential area located east of China Garden Road. Alternative 2 would remove the same amount of vegetation as Alternative 3 at these locations within the Open Space visual assessment unit. The plantings near Cattlemens restaurant, Roseville Yamaha, and Enterprise Rent-A-Car and within the I-80 and SR 65 interchange western ramps would be impacted the least under Alternatives 2 and 3 and result in

less vegetation removal at these locations, compared to Alternative 1. Removal of the existing eastbound I-80 off-ramp and off-ramp to SR 65 would likely not affect vegetation. Because an undercrossing would not be constructed under I-80 to accommodate the Taylor Road connection, construction activities from earthwork and bridge construction would be slightly less visible at this location along I-80. The Taylor Road off-ramp from eastbound I-80 would be slightly reconfigured, and the westbound I-80 on-ramp from Taylor Road would be reconfigured. This would result in slightly more construction occurring in proximity to the Taylor Road overcrossing.

Operation

Operational impacts under Alternative 2 would be the same as described above for “Alternatives 1, 2, and 3.” An additional bridge would cross Miners Ravine near the Atlantic Street/Eureka Road interchange, between the I-80 corridor and the Atlantic Street/Eureka Road off-ramp. It is not anticipated that this new bridge would substantially alter the existing visual character at this location because one large bridge for I-80 and two smaller bridges on the ramps are currently present, and the new bridge would be located between existing bridges. Recreationists on Miners Ravine Trail are already familiar with crossing under bridges at this location, and the additional bridge would not alter this experience. The removed eastbound I-80 off-ramp and on-ramp to SR 65 would be regraded and seeded; it would appear to be a natural landform, reducing roadway infrastructure at this location. The modified Taylor Road off-ramp from eastbound I-80 and modified westbound I-80 on-ramp from Taylor Road would be visually similar to existing conditions.

The greatest visual impacts within the I-80 Corridor visual assessment unit under Alternative 2 will be seen as highway users approach the I-80/SR 65 interchange. As seen in KV 1b (simulated conditions), the project would result in a complex connector system that would require fill and mounding to provide bridge clearance over I-80; reconfigured, taller structures; and vegetation removal that are similar to project features under Alternative 1. Under Alternative 2, the additional lanes and ramps would extend farther southeast, where the existing Taylor Road ramp is located, and the existing Taylor Road ramp would be relocated farther southeast. This would create a wider highway corridor, compared to existing conditions and Alternative 1, and the removal of vegetation would make the new and reconfigured ramps and connectors much more visually apparent compared to existing conditions. This alternative would also appear to have more elevated structures because of the configuration of the ramps connecting traffic from I-80 and Taylor Road to SR 65, seen to the right of the I-80 through-traffic lanes in the simulation.

As seen in KV 2b (simulated conditions), the project would create a wider highway corridor, compared to existing conditions. Much of the vegetation within the interchange medians northwest of I-80 would remain intact, and the reconfigured I-80 westbound off-ramp to SR 65 would be realigned further north. The existing off-ramp would be removed, regraded, and seeded. This would create a natural looking hillside, reducing roadway infrastructure in the foreground of views from westbound I-80 at this location. The new support piers and elevated roadways of the proposed connector system would be partially obscured by the vegetation that would remain. However, these features would still be visually apparent within the landscape and would increase the amount of visible transportation infrastructure within this view compared to existing conditions. The HOV direct connector from I-80 to SR 65 would be located in the middle of I-80 and would obscure views of the I-80 corridor beyond; currently, views down the corridor are not obscured until the Taylor Road Overcrossing. Many of the reconfigured connectors would be of similar height to the existing SR 65 bridge over I-80, but the reconfigured SR 65 connector to eastbound I-80 would be much taller than the existing structures.



Key View 1b, Existing View and Alternative 2 Simulated Conditions—from Eastbound I-80 near the SR 65 Exit.



Key View 2b, Existing View and Alternatives 2 and 3 Simulated Conditions—from Westbound I-80 near the SR 65 Exit.

Viewer Response

Table 8 summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the key view noted. Viewer response of highway users would be high (KV 1b) and moderate-high (KV 2b). Viewers within this unit have the greatest exposure to major changes associated with the project area. Although they would come in direct visual contact with the project site only while travelling through the area and views would be intermittent, many roadway users travel this route on a daily basis for work commutes and are familiar with the existing visual conditions. The modified interchange, roadway widening, and associated vegetation removal would alter the existing visual character of the project area, and highway users would likely view these changes negatively.

Table 8. Viewer Response (VR) Numerical Rating for Alternative 2 – I-80 Corridor Visual Assessment Unit (Key Views 1b and 2b)		
Key View	1b	2b
Exposure (E) rating	6	6
Sensitivity (S) rating	5	4
VR = (E+S)/2	5.5	5

Resource Change

Construction

Construction would affect the existing visual quality because it would occur within this visual assessment unit for an extended period of time and would result in impacts on some native trees and shrubs and other vegetation that provides aesthetic qualities along the corridor. When combined with viewer response, construction would result in a resource change to this visual assessment unit that is moderate-low; the resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate to moderate-high.

Operation

The vividness of the I-80 Corridor visual assessment unit would be greatly affected by the project, and the rating would be reduced to from moderate-high to low (KV1b) to moderate (KV 2b). The intactness and unity would also be reduced from moderate-high to low (KV1b) to moderate (KV 2b) because the reconfigured I-80/SR 65 connectors would alter the appearance of the highway corridor and introduce substantial anthropogenic features—primarily associated with the connectors—that would segment the landscape. The overall visual quality would be reduced from moderate-high to low (KV1b) to moderate (KV 2b) (refer to Table 10). Operation would result in a resource change to this visual assessment unit that is moderate (KV1b) to low (KV 2b) (refer to Table 11). When combined with viewer response, the resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate-high (KV1b) to moderate (KV 2b).

Table 9 provides the average resource change (i.e., compatibility between the existing condition and Alternative 2) for visual character for all attributes previously identified (e.g., form, line, color, and texture) for KV 1b and KV 2b.

Table 9. Visual Character Numerical Evaluation for Alternative 2 – I-80 Corridor Visual Assessment Unit (Key Views 1b and 2b)	
Key View	Visual Character (Compatibility) Change (VC) =
1b	-2.5
2b	-1.5

Table 10 provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and Alternative 2 for KV 1b and KV 2b.

Table 10. Visual Quality Numerical Evaluation for Alternative 2 – I-80 Corridor Visual Assessment Unit (Key Views 1b and 2b)						
Key View		Vividness (V)	Intactness (I)	Unity (U)	Visual Quality (VQ)	Visual Quality Change (VQC) =
1b	Alternative Rating	2	2	2	2.5	-2.7

	Existing Rating	5	4.5	4.5	4.7	
2b	Alternative Rating	3.5	3.5	4	3.7	-1
	Existing Rating	5	4.5	4.5	4.7	

Table 11 summarizes visual character and visual quality changes under Alternative 2, and averages these resource changes for KV 1b and KV 2b.

Table 11. Visual Resource Change (RC) Numerical Rating for Alternative 2 – I-80 Corridor Visual Assessment Unit (Key Views 1b and 2b)		
Key View	1b	2b
Visual character (VC) rating	-2.5	-1.5
Visual quality change (VQC) rating	-2.7	-1
RC = (VC+VQ)/2	-2.6	-1.3

Alternative 3

Construction

Construction impacts under Alternative 3 would be the same as described above for “Alternatives 1, 2, and 3.” Under Alternative 3, an additional bridge would not be constructed across Miners Ravine near the Atlantic Street/Eureka Road interchange, and less construction and vegetation removal would be required at this location than under Alternative 2. Slightly less vegetation removal than under Alternative 1 would be required within the Open Space visual assessment unit along the eastern edge of the I-80 corridor, starting near the eastbound I-80 on-ramp from SR 65 and extending up to the residential area located east of China Garden Road. Alternative 3 would remove the same amount of vegetation as Alternative 2 at this location. Like Alternative 2, it would remove the least amount of vegetation associated with the plantings near Cattlemens restaurant, Roseville Yamaha, and Enterprise Rent-A-Car and within the I-80 and SR 65 interchange western ramps compared to Alternative 1. Also like Alternative 2, removal of the existing eastbound I-80 off-ramp and on-ramp to SR 65 likely would not affect vegetation. An undercrossing would not be constructed under I-80 to accommodate the Taylor Road connection. This would result in slightly less visible construction activities from earthwork and bridge construction at this location along I-80. Removal of the Taylor Road on-ramp likely would not affect vegetation.

Operation

Operational impacts under Alternative 3 would be the same as described above for “Alternatives 1, 2, and 3.” The removed Taylor Road ramps and eastbound I-80 on-ramp and off-ramp to SR 65 would be regraded and seeded; it would appear to be a natural landform, reducing roadway infrastructure at these locations. The modified Atlantic Street/Eureka Road ramps would appear visually similar to existing conditions.

The greatest visual impacts within the I-80 Corridor visual assessment unit would be seen as highway users approach the I-80/SR 65 interchange. As seen in KV 1c (simulated conditions), the project would result in a complex connector system that would require fill and mounding to provide bridge clearance over I-80; reconfigured, taller structures; and vegetation removal. Like Alternative 2, the additional lanes and ramps would extend farther southeast under Alternative 3, where the existing Taylor Road ramp is located. This

would create a wider highway corridor, compared to existing conditions and Alternative 1, and the removal of vegetation would make the reconfigured ramps and connectors much more visually apparent compared to existing conditions. The Taylor Road ramp would be removed, regraded, and seeded. This would appear to be a natural landform, reducing roadway infrastructure at this location, and creating a new open space area in the foreground of views from the Taylor Road overcrossing and eastbound I-80 that is smaller than the open space area created under Alternative 1. Like Alternative 2, Alternative 3 would also appear to have more elevated structures because of the configuration of the ramps connecting traffic from I-80 to SR 65, seen to the right of the I-80 through-traffic lanes in the simulation.

Alternative 3 would appear the same when seen from the westbound approach, as seen in KV 2b (simulated conditions). The project would create a wider highway corridor compared to existing conditions. Much of the vegetation within the interchange medians northwest of I-80 would remain intact, and the reconfigured I-80 westbound off-ramp to SR 65 would be moved farther north. The existing off-ramp would be removed, regraded, and seeded. This would create a natural looking hillside, reducing roadway infrastructure in the foreground of views from westbound I-80 at this location. The new support piers and elevated roadways of the proposed connector system would be partially obscured by the vegetation that would remain. However, these features would still be visually apparent within the landscape and would increase the amount of visible transportation infrastructure within this view compared to existing conditions. The HOV direct connector from I-80 to SR 65 would be located in the middle of I-80 and would obscure views of the I-80 corridor beyond; currently, views down the corridor are not obscured until the Taylor Road overcrossing. Many of the reconfigured connectors would be of similar height to the existing SR 65 bridge over I-80, but the reconfigured SR 65 connector to eastbound I-80 would be much taller than the existing structures.

Viewer Response

Table 12 summarizes viewer exposure and viewer sensitivity ratings for Alternative 3, and averages these viewer response ratings for KV 1c and KV 2b. Highway users viewer response would be high (KV 1c) and moderate-high (KV 2b). Viewers within this unit have the greatest exposure to major changes associated with the project area. Although they come in direct visual contact with the proposed project only while travelling through the area and views would be intermittent, many roadway users travel this route on a daily basis for work commutes and are familiar with the existing visual conditions. The modified interchange, roadway widening, and associated vegetation removal would alter the existing visual character of the project area, and highway users would likely view these changes negatively.

Table 12. Viewer Response (VR) Numerical Rating for Alternative 3 – I-80 Corridor Visual Assessment Unit (Key Views 1c and 2c)		
Key View	1c	2b
Exposure (E) rating	6	6
Sensitivity (S) rating	5	4
VR = (E+S)/2	5.5	5

Resource Change

Construction

Construction under Alternative 3 would affect the existing visual quality because it would occur within the I-80 Corridor visual assessment unit for an extended period of time and would remove some native trees,

shrubs, and other vegetation that provide aesthetic qualities along the corridor. When combined with viewer response, construction would result in a resource change to this visual assessment unit that is moderate-low; the resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate to moderate-high.

Operation

The vividness of the I-80 Corridor visual assessment unit would be greatly affected by the project under Alternative 3, and the rating would be reduced from moderate-high to moderate-low (KV 1c) to moderate (KV 2b). The intactness and unity also would be reduced from moderate-high to low (KV 1c) to moderate (KV 2b) because the reconfigured I-80/SR 65 connectors would alter the appearance of the highway corridor and introduce substantial anthropogenic features—primarily associated with the connectors—that would segment the landscape. The overall visual quality would be reduced from moderate-high to low (KV 1c) to moderate (KV 2b) (refer to Table 14). Therefore, operation would result in a resource change to this visual assessment unit that is moderate-low (KV 1c) to low (KV 2b) (refer to Table 15). When combined with viewer response, the resulting visual impacts to scenic views, the existing visual character, and light and glare would be moderate-high (KV 1c) to moderate (KV 2b).

Table 13 provides the average resource change (i.e., compatibility between the existing condition and Alternative 3) for visual character for all attributes previously identified (e.g., form, line, color, and texture) for KV 1c and KV 2b.

Table 13. Visual Character Numerical Evaluation for Alternative 3 – I-80 Corridor Visual Assessment Unit (Key Views 1c and 2c)	
Key View	Visual Character (Compatibility) Change (VC) =
1c	-2
2b	-1.5

Table 14 provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and Alternative 3 for KV 1c and KV 2b.

Table 14. Visual Quality Numerical Evaluation for Alternative 3 – I-80 Corridor Visual Assessment Unit (Key Views 1c and 2c)						
Key View		Vividness (V)	Intactness (I)	Unity (U)	Visual Quality (VQ)	Visual Quality Change (VQC) =
1c	Alternative Rating	2.5	2	2	2.5	-2.5
	Existing Rating	5	4.5	4.5	4.7	
2b	Alternative Rating	3.5	3.5	4	3.7	-1
	Existing Rating	5	4.5	4.5	4.7	

Table 15 summarizes visual character and visual quality changes under Alternative 3, and averages these resources changes for KV 1c and KV 2b.

Table 15. Visual Resource Change (RC) Numerical Rating for Alternative 3 – I-80 Corridor Visual Assessment Unit (Key Views 1c and 2c)		
Key View	1c	2b
Visual character (VC) rating	-2	-1.5
Visual quality change (VQC) rating	-2.5	-1
RC = (VC+VQ)/2	-2.3	-1.3

SR 65 CORRIDOR VISUAL ASSESSMENT UNIT

Alternatives 1, 2, and 3

Visual impacts associated with construction and operation would not vary among the alternatives within the SR 65 Corridor visual assessment unit because the design of all three alternatives is the same within the corridor. Consequently, the following construction and operation features would be the same under all three build alternatives.

Construction

Construction would occur during the same timeframe described under “Alternatives 1, 2, and 3” for the I-80 Corridor visual assessment unit. Construction activities could be located in this area over multiple sub-phases and last longer than 2 years. Construction activities would introduce considerable heavy equipment and associated vehicles, including backhoes, compactors, tractors, cranes, and trucks, into the viewshed of highway users. Construction staging would occur within the right-of-way, including within ramp interiors that would be immediately visible to passing viewers. Construction signaling and signage also would be visible to direct traffic and would signify lane shifts and closures. The presence of construction activities and equipment would affect views seen of and from the project site during the construction period. This impact is considered adverse because while each sub-phase would last for only 2 years, construction within the SR 65 corridor would be perceived as a continual event within the corridor. Highway users are transient and familiar with heavy equipment associated with other highway construction projects, but the proposed project and its alternatives constitute a major highway construction project.



Key View 1c, Existing View and Alternative 3 Simulated Conditions—from Eastbound I-80 near the SR 65 Exit.

Evening and nighttime construction activities would require the use of extremely bright lights, which would negatively affect highway users and nighttime views of and from the work area. Implementation of Mitigation Measure 1, *Minimize Fugitive Light from Portable Sources Used for Construction* would reduce this impact by helping to prevent nuisance light spill during construction.

Operation

Operational impacts under Alternative 3 would result from highway and East Roseville Viaduct widenings, addition of HOV lanes, introduction of lane barriers, ramp improvements, and vegetation removal that would be visible to highway users within the SR 65 corridor.

SR 65 would be widened to the north and south to accommodate one additional mixed-flow lane and one or two auxiliary lanes in each direction of travel. An HOV lane would be added in each direction within the existing median, which would be paved; and the lanes would be separated from general traffic by lane barriers between I-80 and the Galleria Boulevard/Stanford Ranch Road interchange. In addition, a 4-foot-wide pavement delineation soft barrier would separate the southbound HOV and general purpose lanes between the Galleria Boulevard/Stanford Ranch Road on-ramp and the eastbound I-80 HOV direct connector ramp. As seen in KV 3, (simulated conditions), widening to the south would not be very noticeable. However, lane barriers—although shorter—would physically and visually separate traffic traveling in opposite directions. They would also partially obscure the lower portions of views of oncoming traffic. In locations where more lanes are added, the widened lanes, pavement, and striping associated with the project would slightly alter the existing visual character of the project area, as seen by highway users, by expanding the highway corridor and the amount of lanes visible, increasing the amount of paved surfaces, and slightly increasing daytime glare by transforming less reflective, grassy surfaces to more reflective, paved surfaces. All ramps at the SR 65/Galleria Boulevard/Stanford Ranch Road interchange would be reconstructed to accommodate additional lanes on SR 65. Reconstruction also includes the addition of an HOV preferential lane on the Galleria Boulevard/Stanford Ranch Road on-ramp from southbound SR 65 and widening the northbound Stanford Ranch Road slip off-ramp to two lanes. Widened ramps would appear similar to existing facilities in the area and would not constitute a substantial visual change or greatly increase daytime glare.

Widening would reduce the amount of grassland areas within the right-of-way along the SR 65 corridor, within the median, and where on-ramps and off-ramps are widened, but no mature trees or shrubs would be affected along this stretch of roadway or along these ramps. The visual character of the corridor would be negatively affected by reducing grassland areas to accommodate widening, the HOV lanes, and the wider interchange ramps. Implementation of Mitigation Measure 2, *Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix* would reduce this impact by creating seasonal visual interest.

A retaining wall would be built under the Galleria Boulevard/Stanford Ranch Road overcrossing, along northbound SR 65, to accommodate ramp improvements. Retaining walls would create vertical surfaces that limit views and would create a sense of enclosure, compared to locations that lack such features. In addition, retaining walls have large surfaces that may result in increased reflective glare from sunlight during the day and from artificial light sources at night. These impacts are considered adverse because retaining walls replace views of grassland areas and create a channelized effect, and reflective glare could occur from those surfaces facing highway users. Implementation of Mitigation Measure 4, *Implement Project Design Aesthetics* would reduce this impact.

The greatest visual impacts within the SR 65 Corridor visual assessment unit would be seen as highway users cross the East Roseville Viaduct in both directions, and when crossing the East Roseville Viaduct on

the southbound approach to the I-80/SR 65 interchange. The viaduct would be widened to accommodate the center HOV lanes, two new northbound lanes, and an additional southbound lane. This would remove the center gap that presently exists between the two viaduct structures and widen the structure out to the north and south. The viaduct structure would appear to be one large, very wide bridge structure when traveling over it in both directions. Closing the center gap between the two existing structures would prevent views of the tree tops of riparian vegetation that presently can be seen when crossing over Antelope Creek.

The most major visual changes associated with project alternatives would be seen when highway users are traveling south over the East Roseville Viaduct and approaching the I-80/SR 65 loop connectors and structures over I-80. The existing SR 65 bridge over I-80 has two parallel structures that are approximately 26 feet tall at the top of the side barriers. In the reconfigured system of connectors, three to four aerial structures would cross over I-80 in addition to other connector ramps at this location, depending on the alternative. The tallest of the reconfigured structures would be approximately 71 feet high at the top of the structure, when measured from the existing I-80 highway grade, making the reconfigured structure 45 feet taller than the existing structures. These structures would be different heights and would be seen diverging into the viaduct near where the UPRR tracks cross under the viaduct. This would create new visual features and a new visual pattern in this area that would obscure views beyond only to a small degree and would alter the existing visual character. The bridge materials would be visually similar to those of the existing structures, but the visual prominence of the connectors would be greatly enhanced by the amount of reconfigured connectors introduced into the viewshed and their increased height. Implementation of Mitigation Measure 4, *Implement Project Design Aesthetics* would reduce impacts associated with the connectors.

Alternatives would require relocation of existing lights to accommodate lane widening and ramp improvements. New lights associated with reconfigured connectors would be at a higher elevation and have the potential to make lighting more prominent, if not properly designed. Implementation of Mitigation Measure 5, *Apply Minimum Lighting Standards* would reduce this impact.

Viewer Response

Table 16 summarizes viewer exposure and viewer sensitivity ratings under Alternatives 1, 2, and 3 in the SR 65 visual assessment unit, and averages these viewer response ratings for KV 3. Viewer response of highway users would be moderate-high (KV 3). Viewers within this unit have the greatest exposure to major changes associated with the project area. Although they come in direct visual contact with the project only while travelling through the area and views would be intermittent, many roadway users travel this route on a daily basis for work commutes and are familiar with the existing visual conditions. The HOV lanes, roadway and viaduct widening, and associated vegetation removal would alter the existing visual character of the project area, and highway users would likely view these changes negatively.

Table 16. Viewer Response (VR) Numerical Rating for Alternatives 1, 2, and 3 – SR 65 Corridor Visual Assessment Unit (Key View 3)	
Key View	3
Exposure (E) rating	5
Sensitivity (S) rating	4
VR = (E+S)/2	4.5

Resource Change

Construction

Construction would result in impacts on the existing visual quality of the SR 65 visual assessment unit because it would occur within the unit for an extended period of time and affect grassland areas that provide aesthetic qualities along the corridor. When combined with viewer response, construction would result in a resource change to this visual assessment unit that is low; the resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate.

Operation

The vividness of the SR 65 Corridor visual assessment unit would not be affected by the project and would remain moderate. The intactness and unity would be slightly affected and would be reduced from moderate-high to moderate because the new HOV lanes and lane barriers would alter the appearance of the highway corridor by reducing grassland areas, increasing pavement, and introducing visual barriers that would segment the corridor. The overall visual quality would not be reduced and would remain moderate (refer to Table 17). Operation would result in a resource change to this visual assessment unit that is low (refer to Table 18). When combined with viewer response, the resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate.

Table 17 provides the average resource change (i.e., compatibility between the existing condition and Alternatives 1, 2, and 3) for visual character for all attributes previously identified (e.g., form, line, color, and texture) for the KV 3.

Table 17. Visual Character Numerical Evaluation for Alternatives 1, 2, and 3 – SR 65 Corridor Visual Assessment Unit (Key View 3)	
Key View	Visual Character (Compatibility) Change (VC) =
3	1.5

Table 18 provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and Alternatives 1, 2, and 3 for KV 3.

Table 18. Visual Quality Numerical Evaluation for Alternatives 1, 2, and 3 – SR 65 Corridor Visual Assessment Unit (Key View 3)						
Key View		Vividness (V)	Intactness (I)	Unity (U)	Visual Quality (VQ)	Visual Quality Change (VQC) =
3	Alternative Rating	4	4	4	4	-0.3
	Existing Rating	4	4.5	4.5	4.3	

Table 19 summarizes visual character and visual quality changes under Alternatives 1, 2, and 3, and averages these resources changes for KV 3.

Table 19. Visual Resource Change (RC) Numerical Rating for Alternatives 1, 2, and 3 – SR 65 Corridor Visual Assessment Unit (Key View 3)	
Key View	3
Visual character (VC) rating	1.5
Visual quality change (VQC) rating	-0.3
RC = (VC+VQ)/2	0.6

Existing View



Simulation



Key View 3, Existing View and Alternatives 1, 2, and 3 Simulated Conditions—from Southbound SR 65 near the I-80 Exit.

OPEN SPACE VISUAL ASSESSMENT UNIT

Alternatives 1, 2, and 3

Construction and operation features would be the same or very similar in the Open Space visual assessment unit under all three build alternatives. Consequently, visual impacts associated with construction and operation would not vary among the build alternatives, as described below.

Construction

Construction in the Open Space visual assessment unit would occur during the same timeframe as described under “Alternatives 1, 2, and 3” for the I-80 Corridor visual assessment unit. Construction activities could be located in this area over multiple sub-phases and last longer than 2 years. Woodside Park would not be affected by construction because it is located outside of the I-80 right-of-way and separated from it by a sound wall. The portion of the Open Space visual assessment unit located southeast of I-80 would be affected by vegetation removal and structure construction in a similar manner under all build alternatives. Similarly, construction impacts near the portion of the Antelope Creek Trail that passes under the East Roseville Viaduct would not vary because the design of all three build alternatives is the same at this location. Recreational highway neighbors would be able to see heavy equipment and associated vehicles such as backhoes, compactors, tractors, and cranes erecting the reconfigured elevated structures and constructing piers, and associated vegetation removal and earthwork would be visible. This would introduce intense construction activities very close to nearby formal and informal trails at ground level and elevated off the ground. Recreational highway neighbors would not be familiar with heavy equipment and associated construction occurring in their immediate vicinity at such close range and over an extended period of time. Construction activities would affect their recreational experience, and they would be highly sensitive to the impact of construction. It is not anticipated that recreationists would use trails at night; therefore, evening and nighttime construction activities would not affect them.

Operation

All build alternatives would include highway and East Roseville Viaduct widening, addition of HOV lanes, removal and replacement of I-80/SR 65 connectors, and associated vegetation removal that would affect viewers in the Open Space visual assessment unit. Woodside Park would not be affected by project operation because the park is located outside of the I-80 right-of-way and separated from view by a sound wall. Recreationists within the portion of the unit located southeast of I-80 would have views of the project through the trees from some of the informal trails that weave through the area at this location. These views may be limited by oak trees and may include views of portions of connectors and connector support structures that would introduce the presence of elevated structures. The tallest I-80/SR 65 interchange connector structure that is 71-feet tall may be more visible, rising over the tops of trees, in some locations. If visible, however, it is expected that only smaller portions of the structure would be seen, not an extensive surface area, and that the trees would mostly screen and reduce the apparent scale of visible portions of the structure. Impacts associated with the I-80/SR 65 interchange connector structures at this location would not vary under the build alternatives because all three alternatives propose structures of the same height. Visual changes resulting from vegetation removal also would be similar because the amount of removal would be similar and would generally affect the same areas. The only difference between the alternatives would be the nuances on where the available views of portions of the interchange connector structure would be seen if it rises above the tree line because of slight variations on where the structure would be located between the alternatives. The visual impact would be the same for all build alternatives. In addition, visibility would increase in fall and winter when deciduous trees are dormant.

The portion of open space area where the Antelope Creek Trail passes under the East Roseville Viaduct would be affected by the widened, elevated viaduct structures. Impacts associated with the widened viaduct would not vary by alternative because all three build alternatives propose the same widening scheme. Widening of approximately 13 to 15 feet would occur south of the existing structure, but most of the widening occurs 35 feet north of the existing structure. As seen in KV 4 (simulated conditions), the project would result in the removal of grasslands, trees, and shrubs located between the two existing viaducts, including riparian vegetation along Antelope Creek. The viaduct would be widened to accommodate the center HOV lanes, two new northbound lanes, and an additional southbound lane. This would remove the center gap that presently exists between the two viaduct structures and would widen the structure out to the north and south. The viaduct structure would be one large, very wide bridge structure; would introduce additional support columns; and would create a greater sense of enclosure when traveling on the trail under the structure. Closing the center gap between the two existing structures also would prevent sunlight from hitting the trail and would increase shade. This change may be perceived as negative or beneficial. Some recreational viewers using the trail or accessing the creek's edge may view these changes as negative because of the introduction of additional transportation infrastructure into the open space area. Conversely, some recreational viewers may view this positively because the increased structure could provide an expanded area of shade in the hot summer months and protection from rain in fall and winter.

The structure would be visually similar to existing conditions when approaching from a distance. It would not be until recreational viewers are closer and traveling underneath that the widened structure would be perceived as a larger overhead mass. Impacts would be greatest when seen from the north because the reconfigured structure comes within 20 feet of the Hearthstone and Placer West apartment complexes and may appear to loom over these complexes. A portion of the Antelope Creek Trail would also need to be realigned under the viaduct to accommodate a new pier. The trail alignment under the viaduct would be shifted to the north. This would not result in a substantial change to the visual environment because it would only be a slight shift and the relocated portion of the trail would appear visually similar to existing conditions. Implementation of Mitigation Measures 2, *Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix*; 3, *Implement Interchange and Slope Landscaping and Visual Buffers*; and 4, *Implement Project Design Aesthetics* would reduce impacts associated with vegetation removal by improving re-planted grassland aesthetics and vegetative buffers and those associated with the viaduct by improving its aesthetics.

In addition, existing lights that required relocation to accommodate viaduct widening would have the potential to spill onto adjacent open space areas or to make lighting more prominent if not properly designed. Implementation of Mitigation Measure 5, *Apply Minimum Lighting Standards* would reduce impacts associated with light relocations.

Viewer Response

Table 20 summarizes viewer exposure and viewer sensitivity ratings under Alternatives 1, 2, and 3 and averages these viewer response ratings for KV 4. The viewer response of recreational highway neighbors would be moderate-high (KV 4). Viewers within this unit have less direct exposure to moderate changes associated with the project area, they come in direct visual contact with the proposed project only while travelling through the area, and views would be intermittent. Nevertheless, many recreationists value the existing visual conditions within the unit. The widened viaduct, addition of supports, and associated vegetation removal would alter the existing visual character of the project area, and would create additional shade and cover. Recreational highway neighbors may view these changes as negative or beneficial.

Table 20. Viewer Response (VR) Numerical Rating for Alternatives 1, 2, and 3 – Open Space Visual Assessment Unit (Key View 4)	
Key View	4
Exposure (E) rating	4
Sensitivity (S) rating	6
VR = (E+S)/2	5

Resource Change

Construction

Construction would affect the existing visual quality in the Open Space visual assessment unit because it would occur within the unit for an extended period of time and would affect grassland areas that provide aesthetic qualities along the corridor. When combined with viewer response, construction would result in a resource change to this visual assessment unit that is low; the resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate.

Operation

The vividness of the Open Space visual assessment unit would be affected by the project and would be reduced from high to moderate-high because of the prominence of the I-80/SR 65 connectors, the widened viaduct, and removal of vegetation. Intactness and unity also would be affected by these changes but would remain moderate-high. The overall visual quality in the unit would not be reduced and would remain moderate-high (refer to Table 22). Operation would result in a resource change to this visual assessment unit that is low (refer to Table 23). When combined with viewer response, the resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate.

Table 21 provides the average resource change (i.e., compatibility between the existing condition and Alternatives 1, 2, and 3) for visual character for all attributes previously identified (e.g., form, line, color, and texture) for KV 4.

Table 21. Visual Character Numerical Evaluation for Alternatives 1, 2, and 3 – Open Space Visual Assessment Unit (Key View 4)	
Key View	Visual Character (Compatibility) Change (VC) =
4	1

Table 22 provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and Alternatives 1, 2, and 3 for KV 4.



Key View 4, Existing View and Alternatives 1, 2, and 3 Simulated Conditions—from Antelope Creek Trail south of the East Roseville Viaduct.

Table 22. Visual Quality Numerical Evaluation for Alternatives 1, 2, and 3 – Open Space Visual Assessment Unit (Key View 4)						
Key View		Vividness (V)	Intactness (I)	Unity (U)	Visual Quality (VQ)	Visual Quality Change (VQC) =
4	Alternative Rating	5	4.5	4.5	4.7	-0.7
	Existing Rating	6	5	5	5.3	

Table 23 summarizes visual character and visual quality changes under Alternatives 1, 2, and 3 and averages these resource changes for KV 4.

Table 23. Visual Resource Change (RC) Numerical Rating for Alternatives 1, 2, and 3 – Open Space Visual Assessment Unit (Key View 4)	
Key View	4
Visual character (VC) rating	1
Visual quality change (VQC) rating	-0.7
RC = (VC+VQ)/2	0.2

RESIDENTIAL VISUAL ASSESSMENT UNIT

Alternatives 1, 2, and 3

The following construction and operation features would be the same or very similar under all three build alternatives. Consequently, visual impacts in the Residential visual assessment unit would not vary by alternative.

Construction

Residential areas located south of Whitney Boulevard, along Gibson Drive, between Roseville Parkway and SR 65, southeast of China Garden Road, and north of Secret Ravine Parkway and Scarborough Drive would not be affected by construction because they are located away from the right-of-way and would not have direct views of construction. Because residential areas located southeast of Pacific Street and southeast of China Garden Road are separated from the I-80 corridor by soundwalls and landscaping, these residences would not have direct views of construction. Therefore, the primary residential areas that would be affected by construction would be the multi-family housing complexes that border Antelope Creek and are located northwest of Taylor Road/Pacific Street and on either side of the East Roseville Viaduct. Because these residences are located at a lower elevation, at the level of the base of the bypass support piers, they would be able to see heavy equipment and associated vehicles, including backhoes, compactors, tractors, and cranes, erecting the reconfigured elevated structures. This would introduce intense construction activities very close to nearby multi-family homes at ground levels and elevations of approximately 50 feet above ground level floors of the apartments. This would create a sense of visual intrusion and privacy invasion because construction workers could have visual access to

residences located directly adjacent to construction on all levels. Residents may refrain from leaving curtains or blinds open, which would block sunlight and prevent views of the nearby open spaces. Viewers in community areas would be able to see the elevated structures being raised and would be highly sensitive to the impact of construction.

Construction would result in some vegetation removal in proximity to the Placer West Apartments that would reduce the effectiveness of the existing vegetative screening. Construction would occur during the same timeframe as described under “Alternatives 1, 2, and 3” for the I-80 Corridor visual assessment unit. Therefore, construction activities could be located in this area over multiple sub-phases and last longer than 2 years. Residential highway neighbors would not be familiar with heavy equipment and associated construction occurring so close to them.

Evening and nighttime construction activities would require the use of extremely bright lights, which would negatively affect residential highway neighbors and nighttime views of and from the work area. Limiting construction near residences to daylight hours cannot be accommodated by the proposed project because while the majority of the project work would be during the day, night work would be necessary to complete some key construction operations or to avoid high traffic volumes, including on the East Roseville Viaduct. For instance, the ability to use cranes during the day may be infeasible due to high daytime winds, resulting in the need to suspend crane activity until the night when winds die down. Nighttime operations near residences would only occur intermittently, on an as-needed basis. Mitigation Measure 6, *Install Visual Barriers between Construction Work Areas and Sensitive Receptors*, would help to partially reduce this impact by helping to prevent nighttime light spill during construction near residential areas and by screening construction activities visible to residences during the night and day. However, it is likely that even with installation of visual screening construction activities occurring at higher elevations, including high-intensity nighttime lighting, would be visible over the top of such screening. Residences in the Hearthstone Apartments would be the most affected because they are located closest to the proposed changes and lack dense vegetative screening that would benefit the other nearby complexes. Impacts associated with construction would not vary by alternative because the same activities would occur near residential areas under all three build alternatives.

Operation

The primary changes with the potential to be seen from the Residential visual assessment unit would be the widened I-80 corridor, 71-foot-tall I-80/SR 65 interchange connector structure, and widened East Roseville Viaduct structure. Residential areas located south of Whitney Boulevard, along Gibson Drive between Roseville Parkway and SR 65, and southeast of China Garden Road would not be affected by operational changes associated with the project because they are located away from the right-of-way; existing vegetation and development limit their views to their immediate respective foregrounds; and they would not have direct views of the project, once built. Because the residential areas located southeast of Pacific Street and southeast of China Garden Road are separated from the I-80 corridor by soundwalls and landscaping, these residences would not have direct views of the widened I-80 corridor once completed. Impacts associated with widening of I-80 at these locations generally would not vary by alternative because all three alternatives propose the same widening scheme at these locations, except for near the I-80 westbound on-ramp to SR 65 under Alternative 1. Under Alternative 1, the soundwall at this location would need to be shifted approximately 20 feet to the north for a distance of approximately 500 feet. The soundwall would move closer to the back edge of the backyards of residences, and residences at this location have fencing and mature landscaping that would prevent or limit views. For residences with chain-link fencing in the backyard, the wall shift would appear visually similar to existing conditions and would not constitute a substantial alteration to the existing visual character.

The majority of residences located north of Secret Ravine Parkway and Scarborough Drive are not likely to have views of the project because of distance from the right-of-way and intervening mature oak woodlands. However, select residences that border the edge of the adjacent Open Space visual assessment unit may have limited views of portions of the tallest I-80/SR 65 interchange connector structure that is 71-feet tall because this structure may be visible over the tops of trees in some locations. If visible, it is expected that only smaller portions of the structure would be seen, not an extensive surface area, and that the trees would mostly screen and reduce the apparent scale of visible portions of the structure. Impacts associated with the I-80/SR 65 interchange connector structures at this location would not vary by alternative because all three build alternatives propose structures of the same height. The only difference between the alternatives would be the nuances on where the available views of portions of the structure would be seen if it rises above the tree line, due to slight variations on where the structure would be located between the alternatives. The visual impact would be the same under all build alternatives. In addition, visibility would increase in fall and winter when deciduous trees are dormant.

Elevated viaduct structures would be close to the apartment complexes that border Antelope Creek, on either side of the East Roseville Viaduct. Impacts associated with the widened viaduct would not vary by alternative because all three alternatives propose the same widening scheme. Widening of approximately 13 to 15 feet would occur south of the existing structure, but most of the widening occurs 35 feet north of the existing structure. Views of the widened viaduct from the south would not be substantially altered for residents at the Preserve at Creekside Apartments because dense vegetation, which would not be greatly affected during construction, buffers their views of the structure. Where visible, the structure would appear visually similar to existing conditions. Impacts would be greatest when seen from the north because the reconfigured structure comes within 20 feet of the Hearthstone and Placer West Apartment complexes. The Hearthstone Apartments would be affected the most because they lack dense vegetative screening like the Placer West Apartments. However, some vegetation in proximity to the Placer West Apartments would be removed during construction, reducing some of the existing available buffer. The reconfigured structure would be visually similar to the existing structure, but these features would now be much closer to residences and would appear to tower over them more than current conditions. The reconfigured structures also may increase shading of the Hearthstone and Placer West Apartments during different times of day, which varies seasonally. Implementation of Mitigation Measures 2, *Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix*; 3, *Implement Interchange and Slope Landscaping and Visual Buffers*; and 4, *Implement Project Design Aesthetics* would reduce impacts associated with vegetation removal by improving replanted grassland aesthetics and vegetative buffers and those associated with the viaduct by improving its aesthetics.

In addition, existing lights that required relocation to accommodate viaduct widening would have the potential to spill lighting onto adjacent residential areas or to make lighting more prominent, if not properly designed. Implementation of Mitigation Measure 5, *Apply Minimum Lighting Standards* would reduce impacts associated with light relocations.

Viewer Response

Table 24 summarizes viewer exposure and viewer sensitivity ratings under Alternatives 1, 2, and 3 and averages these viewer response ratings for the Residential visual assessment unit. As described under “Viewer Response” in Section VIII, “Viewers and Viewer Response,” most residential highway neighbors do not have immediate or direct views of the project because views are limited by development, vegetation, and topography. However, longer-term, stationary views are available to residential highway neighbors on the edges of development that are directly adjacent to the project site. The exposure for

these residents would be high because of their prolonged views. Their sensitivity to changes associated with the project would be high because they are close to the site and would likely consider the removal of vegetation and introduction of new transportation structures in proximity to their residences as a negative change. Therefore, their viewer response would be high. Although residential viewers within the project area are familiar with these types of interchanges, the connector structures would rise above the tree line and the widened viaduct would be located much closer to residents, altering the existing visual environment and visual character of the project area.

Table 24. Viewer Response (VR) Numerical Rating for Alternatives 1, 2, and 3 – Residential Visual Assessment Unit	
Key View	N/A
Exposure (E) rating	7
Sensitivity (S) rating	6
VR = (E+S)/2	6.5

Resource Change

Construction

Construction would affect the existing visual quality because it would occur within this unit for an extended period of time and affect grassland areas that provide aesthetic qualities along the corridor. In addition, it would introduce intermittent, disruptive, high-intensity lighting for nighttime construction. When combined with viewer response, construction would result in a resource change to the Residential visual assessment unit that is low; the resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate.

Operation

The vividness of the Residential visual assessment unit would be affected by the project and would be reduced from moderate to moderate-low because of the prominence of the I-80/SR 65 connectors and widened viaduct and the removal of vegetation. Intactness and unity also would be affected by these changes but would remain moderate. The overall visual quality would be reduced from moderate to moderate-low (refer to Table 26). Therefore, operation would result in a resource change to this visual assessment unit that is low (refer to Table 27). When combined with viewer response, the resulting visual impacts on scenic views, the existing visual character, and light and glare would be moderate.

Table 25 provides the average resource change (i.e., compatibility between the existing condition and Alternatives 1, 2, and 3) for visual character for all attributes previously identified (e.g., form, line, color, and texture) for the visual assessment unit.

Table 25. Visual Character Numerical Evaluation for Alternatives 1, 2, and 3 – Residential Visual Assessment Unit	
Key View	Visual Character (Compatibility) Change(VC) =
N/A	-1.5

Table 26 provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and Alternatives 1, 2, and 3 for the visual assessment unit.

Table 26. Visual Quality Numerical Evaluation for Alternatives 1, 2, and 3 – Residential Visual Assessment Unit						
Key View		Vividness (V)	Intactness (I)	Unity (U)	Visual Quality (VQ)	Visual Quality Change (VQC) =
N/A	Alternative Rating	3	3.5	3.5	3.3	-0.7
	Existing Rating	4	4	4	4	

Table 27 summarizes visual character and visual quality changes under Alternatives 1, 2, and 3 and averages these resource changes for the visual assessment unit.

Table 27. Visual Resource Change (RC) Numerical Rating for Alternatives 1, 2, and 3 – Residential Visual Assessment Unit	
Key View	N/A
Visual character (VC) rating	-1.5
Visual quality change (VQC) rating	-0.7
RC = (VC+VQ)/2	-1.1

COMMERCIAL/INSTITUTIONAL VISUAL ASSESSMENT UNIT

Alternatives 1, 2, and 3

The following construction and operation features would be the same or very similar under all three build alternatives. Where impacts differ, they are discussed under the appropriate build alternative.

Construction

Commercial and institutional areas located on either side of SR 65 would be minimally affected by construction because they are located outside of the right-of-way and would not have direct views of construction because they face away from the corridor and landscaping, walls, and terrain help to buffer most views of the SR 65 Corridor from parking areas. Commercial and institutional areas located south of the Atlantic Street/Eureka Road interchange are located at the end of where construction would be occurring, have limited views of the Atlantic Street/Eureka Road interchange because of the Open Space and riparian area bordering Miners Ravine, and would have views of minor construction activities occurring along visible portions of I-80. Because there would only be a limited amount of construction in this area, it is anticipated that construction would occur across a short timeframe at this location and result in temporary, short-term visual impacts. The commercial and institutional area where the Sutter

Medical Complex is located is also likely to be minimally affected by construction activities because mature trees and shrubs associated with the Open Space visual assessment unit screen the project area so that construction would not be visible. However, the hospital is located at a higher elevation than the surrounding area so there may be views from the hospital, particularly from upper floors, of cranes and falsework associated with constructing the elevated connector structures, especially the 71-foot tall structure.

The primary commercial and institutional areas that would be affected by construction would be those along Taylor Road on either side of I-80 because these areas directly abut and have views of the I-80 Corridor, I-80/SR 65 interchange, and Taylor Road. These locations would be able to see heavy equipment and associated vehicles, including backhoes, compactors, tractors, and cranes erecting the reconfigured elevated structures. This would introduce intense construction activities within very close proximity to these areas. In addition, construction would occur during the same timeframe as described under “Alternatives 1, 2, and 3” for the I-80 Corridor visual assessment unit. Therefore, construction activities could be located in this area over multiple sub-phases and last longer than 2 years.

Construction would also result in vegetation removal in proximity to the Atlantic Street/Eureka Road interchange, at the Taylor Road interchange eastbound loop, along the Cattlemens restaurant parking lot, between Roseville Yamaha and Enterprise Rent-A-Car, north of the SR 65 on-ramp from westbound I-80 and south of the I-80 westbound on-ramp from SR 65 because of corridor and ramp widening and construction of reconfigured I-80/SR 65 connectors. Businesses with planter beds along Taylor Road, northwest of I-80, would also be affected because widening of the roadway at this location would require these planter beds to be reduced in size, requiring vegetation removal.

This would create visual impacts to views seen of the project site during the construction period by the visual presence of construction activities and equipment. This is considered adverse because while each sub-phase would only last for 2 years, construction within the I-80 Corridor and along Taylor Road would be perceived as a continual event occurring within the project area. While commercial and institutional highway neighbors are familiar with heavy equipment associated with other highway construction projects, the proposed project and its alternatives constitute a major highway and roadway construction project that would be ongoing for a number of years and be visually disruptive during that time.

Evening and nighttime construction activities would require the use of extremely bright lights, and this would negatively affect commercial and institutional highway neighbors and nighttime views of and from the work area. Implementation of Mitigation Measure 1, *Minimize Fugitive Light from Portable Sources Used for Construction* would reduce this impact by helping to prevent nuisance light spill during construction.

Operation

Commercial and institutional areas located on either side of SR 65 would be minimally affected by the project once completed because they are located outside of the right-of-way, would not have direct views of the project because they face away from the corridor, and landscaping, walls, and terrain help to buffer most views of the SR 65 Corridor from parking areas. Where views do exist, the corridor would not be altered greatly enough to substantially change the existing visual character of the corridor. The I-80 Corridor near commercial and institutional areas located south of the Atlantic Street/Eureka Road interchange would appear visually similar to existing conditions as the project transitions to meet existing lane configurations at this project limit. The commercial and institutional area where the Sutter Medical Complex is located may have limited views of portions of the tallest I-80/SR 65 interchange connector structure that is 71-feet tall because this structure may be visible over the tops of trees in some locations. However, if visible, it is expected that only small portions of the structure would be

seen, not an extensive surface area, and that the trees would mostly screen and reduce the apparent scale of visible portions of the structure. Impacts associated with the I-80/SR 65 interchange connector structures at this location would not vary amongst the alternatives because all three alternatives propose structures of the same height. The only difference between the alternatives would be the nuances on where the available views of portions of the structure would be seen if it rises above the tree line, due to slight variations on where the structure would be located between the alternatives, but the visual impact would be the same. However, the hospital is located at a higher elevation than the surrounding area so the taller structures are likely to be more visually apparent from the upper floors of the hospital. In addition, visibility would increase in the fall and winter when deciduous trees are dormant.

The primary commercial and institutional areas that would be affected by the project once built would be those along Taylor Road on either side of I-80 because these areas directly abut and have views of the I-80 Corridor, I-80/SR 65 interchange, and Taylor Road. All project alternatives would include highway widening, introduction of retaining wall structures and lane barriers, HOV and ramp improvements, removal and replacement of I-80/SR 65 connectors, vegetation removal, widening of Taylor Road, and changes to private properties would be visible to commercial and institutional highway neighbors along the I-80 Corridor and Taylor Road.

Some changes associated with the project alternatives would not greatly alter the existing visual character of the I-80 corridor, such as ramp and intersection improvements and the Taylor Road overcrossing replacement. Ramp and intersection improvements at I-80/Eureka Road/Atlantic Street interchange may include ramp metering, ramp widening for storage or HOV bypass lanes, and auxiliary lanes. The widening ramps would also appear visually similar to existing visual conditions and would not constitute a substantial visual change or greatly increase daytime glare. In addition, the Taylor Road overcrossing would be replaced with a wider structure over I-80 to accommodate additional lanes. While the overcrossing would be widened, all of the features associated with an overcrossing are existing visual elements of the existing overcrossing. The widened overcrossing would not significantly alter the existing visual character of the project area as seen by commercial and institutional highway neighbors, because all additions would be similar in appearance to existing facilities in the area.

The remaining visual changes that would occur as result of the proposed project would result in a higher degree of change, especially when the sum of the parts are seen in unison with one another. One or two mixed-flow lanes and one or two auxiliary lanes in each direction of travel would be added to the existing corridor width, depending on the location within the I-80 corridor. The widened lanes, pavement, and striping associated with the proposed project would slightly alter the existing visual character of the project area, as seen by commercial and institutional highway neighbors, by expanding the highway corridor, amount of lanes visible, increasing the amount of paved surfaces, and slightly increasing daytime glare through of transformation of less reflective, vegetated surfaces to more reflective, paved surfaces. This is because the widening would bring commercial and institutional highway neighbors in closer proximity to the I-80 Corridor between the Taylor Road overcrossing and the I-80/SR 65 interchange. This would be most apparent near Cattlemens restaurant, Enterprise Rent-A-Car, Taylor Road Self Storage, and Hearthstone Apartments.

Widening would also reduce the amount of grassland and vegetated areas within the right-of-way and visual buffer that this vegetation provides to screen views of the I-80 Corridor and I-80/SR 65 connectors from commercial and institution uses. Mature trees and shrubs, including native oak trees, would be removed at the following locations and would alter views for commercial and institutional highway neighbors:

- Evergreen and deciduous trees and shrubs in proximity to the Atlantic Street/Eureka Road interchange,
- Evergreen and deciduous trees and shrubs within the Taylor Road interchange eastbound loop and near the Taylor Road overcrossing, along westbound I-80,
- Perimeter buffer plantings along the Cattlemens restaurant parking lot and between Roseville Yamaha and Enterprise Rent-A-Car,
- Oak woodland vegetation within the Open Space visual assessment unit along the eastern edge of the I-80 corridor, near the Sutter Medical Complex,
- Evergreen and deciduous trees and shrubs north of the SR 65 on-ramp from westbound I-80 and south of the I-80 westbound on-ramp from SR 65, and
- Evergreen and deciduous trees and shrubs within planter beds along Taylor Road, northwest of I-80.

Visible grassland areas along the right-of-way would also be reduced to accommodate widening. The visual character of the corridor would be negatively affected by removal of mature trees and shrubs, which are an aesthetic resource, on the edges of the I-80 right-of-way, along Taylor Road, and between Roseville Yamaha and Enterprise Rent-A-Car to accommodate widening. The widening of Taylor Road would modify planter beds in front of businesses. The planter beds would be reduced in size, reducing the amount of landscaping in some areas, bringing Taylor Road closer to businesses and making the roadway slightly more visually prominent. Implementation of Mitigation Measures 2, *Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix*, and 3, *Implement Interchange and Slope Landscaping and Visual Buffers*, would reduce this impact by creating seasonal visual interest, re-landscaping affected areas, and re-planting visual buffers between sensitive viewers.

All alternatives would also add retaining wall structures and lane barriers that would increase the presence of such features within the I-80 Corridor. This includes a retaining wall between the eastbound Eureka Road/Atlantic Street interchange and the Roseville Parkway overcrossing, cast-in-place retaining wall near the East Roseville Viaduct to support the direct connecting HOV ramp, a tie-back wall under the eastbound Roseville Parkway overcrossing, and a concrete barrier between the northbound HOV and general purpose lanes between I-80 and the Galleria Boulevard/Stanford Ranch Road interchange. Retaining walls are currently located in conjunction with corridor overcrossings and on eastbound I-80 near Roseville Golfland-Sunsplash. Retaining walls would create vertical surfaces that limit views and create a sense of enclosure, compared to locations that lack such features. Lane barriers, while shorter, would enclose HOV lanes, physically and visually channelizing and separating traffic. In addition, retaining walls have large surfaces and barriers also have smaller vertical surface that may result in increased reflective glare from sunlight during the day and from artificial light sources at night. These impacts are considered adverse because views of the I-80 corridor and I-80/SR 65 connectors would become more structuralized where, currently, retaining walls are not a prominent feature and vegetation helps to scale overcrossings. The alteration in views would affect commercial and institutional highway neighbors adjacent to the project area. Implementation of Mitigation Measure 4, *Implement Project Design Aesthetics* would reduce this impact.

The greatest visual changes associated with project alternatives would be the removal and modification of the existing I-80/SR 65 loop connectors and structures over I-80. Mature trees between Roseville Yamaha and Enterprise Rent-A-Car currently obscure views of SR 65 crossing over I-80 and, once the vegetation is removed, the reconfigured I-80/SR 65 loop connectors and structures over I-80 would be more visually prominent. A three-lane flyover structure would be added to accommodate traffic for the eastbound I-80 to northbound SR 65. In addition, a direct connecting HOV ramp in the I-80 median, built

on mechanically stabilized earth walls that transitions to a structure and then to a cast-in-place retaining wall near the East Roseville Viaduct, would be added to serve traffic in both directions. The existing overcrossing has two parallel structures that appear to be one span, which can be seen intermittently within this unit, primarily from parking area and locations that right next to the I-80 Corridor. The existing structures have an approximately 18-foot clearance over I-80 and is approximately 26-feet tall at the top of the side barriers. The reconfigured system of connectors would have 3 to 4 aerial structures crossing over I-80 and other connector ramps, at this location, depending on alternative. The tallest of the reconfigured structures would be approximately 71 feet high at the top of the structure, when measured from the existing I-80 highway grade, making the reconfigured structure 45 feet taller than the existing structures. In addition, the connectors would require fill and mounding to provide bridge clearance over other connector ramps. This would create new landforms that would obscure views beyond only to a small degree and would alter the existing visual character in views that are now more prominent because of vegetation removal. The bridge materials would be visually similar to the existing overcrossing and other nearby overcrossings and the East Roseville Viaduct but the visual prominence of the connectors would be greatly enhanced due to the amount of reconfigured connectors introduced into the viewshed and their increased height. Implementation of Mitigation Measure 4, *Implement Project Design Aesthetics* would reduce impacts associated with the connectors.

Alternatives would require the relocation of existing lights to accommodate lane widening and ramp improvements. New light coming from ramp metering would add an inconsequential amount of light to the project area when meters are in use. However, new lights associated with reconfigured connectors would be at a higher elevation and have the potential to make lighting more prominent, if not properly designed. Implementation of Mitigation Measure 5, *Apply Minimum Lighting Standards* would reduce this impact.

Viewer Response

Table 28 below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for this visual assessment unit. As described under *Viewer Response* in Section VIII, *Viewers and Viewer Response*, most highway neighbors do not have immediate and direct views of the project because they are limited by development, vegetation, and topography. However, longer-term, stationary views are available to highway neighbors on the edges of development that are directly adjacent to the project site. The exposure for these residents would be high because of their prolonged views. Their sensitivity to changes associated with the project would be high because they are in close proximity to the site and would likely view the removal of vegetation and introduction of new transportation structures in close proximity negatively. Therefore, their viewer response would be high. While residential viewers within the project area are familiar with these types of interchanges, the connector structures would rise above the tree line and the widened viaduct would be located much closer to residents, altering the existing visual environment and visual character of the project area.

Table 28. Viewer Response (VR) Numerical Rating for Alternatives 1, 2, and 3	
Key View	N/A
Exposure (E) rating	5
Sensitivity (S) rating	5
VR = (E+S)/2	5

Resource Change

Construction

Construction would result in impacts to the existing visual quality because it would occur within this unit for an extended period of time and result in impacts to grassland areas that provide aesthetic qualities along the corridor. Therefore, when combined with viewer response, construction would result in a resource change to this visual assessment unit that is low and the resulting visual impacts to scenic views, the existing visual character, and light and glare would be moderate.

Operation

The vividness of Commercial/Institutional visual assessment unit would be affected by the proposed project and would be reduced from moderate to moderate-low because of the prominence of the I-80/SR 65 connectors, impacts to businesses along Taylor Road because of the widened I-80 Corridor and Taylor Road, and removal of vegetation. The intactness and unity would also be affected by these changes and be reduced from moderate to moderate-low. The overall visual quality would be reduced from moderate to moderate-low (refer to Table 30). Therefore, operation would result in a resource change to this visual assessment unit that is low (refer to Table 31). When combined with viewer response, the resulting visual impacts to scenic views, the existing visual character, and light and glare would be moderate.

Table 29 provides the average resource change (i.e., compatibility between the existing condition and Alternatives 1, 2, and 3) for visual character for all attributes previously identified (e.g., form, line, color, and texture) for the visual assessment unit.

Table 29. Visual Character Numerical Evaluation for Alternatives 1, 2, and 3	
Key View	Visual Character (Compatibility) Change(VC) =
N/A	-1.5

Table 30 provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and Alternatives 1, 2, and 3 for the visual assessment unit.

Table 30. Visual Quality Numerical Evaluation for Alternatives 1, 2, and 3						
Key View		Vividness (V)	Intactness (I)	Unity (U)	Visual Quality (VQ)	Visual Quality Change (VQC) =
N/A	Alternative Rating	3	3	3	3	-0.8
	Existing Rating	3.5	4	4	3.8	

Table 31 summarizes visual character and visual quality changes under Alternatives 1, 2, and 3 and averages these resources changes for the visual assessment unit.

Table 31. Visual Resource Change (RC) Numerical Rating for Alternatives 1, 2, and 3	
Key View	N/A
Visual character (VC) rating	-1.5
Visual quality change (VQC) rating	-0.8
RC = (VC+VQ)/2	-1.2

Alternative 1

Construction

Construction impacts under Alternative 1 would be the same as described above for *Alternatives 1, 2, and 3*. The primary difference resulting from construction amongst the alternatives would be the amount of vegetation being removed at various locations and impacts to the Cattlemens restaurant and Enterprise Rent-A-Car parking areas. Compared to Alternatives 2 and 3, this alternative would result in the most vegetation removal associated with the plantings near Cattlemens restaurant, Roseville Yamaha, and Enterprise Rent-A-Car. In addition, it would require the largest area of take and demolition of Cattlemens’ restaurant and Enterprise Rent-A-Car’s parking areas. Under Alternative 1, construction would also take place north of Stonehouse Court and south of the East Roseville Viaduct to construct the Taylor Road connection. Construction would require the removal of an open air structure, small accessory building, and some moveable storage units (i.e., PODS) on the affected parcel. However, the roadway extension would be constructed in a commercial area that lacks sensitive viewers, with the primary viewers being drivers passing by on Taylor Road. There would, also, already be a great deal of construction occurring in this general area under all alternatives. Therefore, construction of the Taylor Road connection would appear to be a part of the overall construction activities and not appear to be visually separate or result in additional visual impacts. Relocation of the access to Stonehouse Court would also require take of a portion of the parking area associated with the church located just south of Stonehouse Court. Because construction would result in the alteration of the parking and planting areas associated with businesses along Taylor Road, it is likely that commercial and institutional highway neighbors would view construction negatively.

Operation

Operational impacts under Alternative 1 would be the same as described above for *Alternatives 1, 2, and 3*. The I-80/SR 65 connectors and structures over I-80 would be slightly more visually prominent under this alternative because there would be slightly more vegetation removal near Cattlemens restaurant, Roseville Yamaha, and Enterprise Rent-A-Car. Once the Taylor Road connection is built, a new roadway intersection would be present. However, there is already a nearby intersection at this location because of Stonehouse Court. The new Taylor Road connection would appear as if Stonehouse Court was realigned. Because the Stonehouse Court access would be relocated using an existing entry drive, it would not appear as if there has been an increase in the number of driveways or roadways connecting to Taylor Road. Therefore, because this area lacks sensitive viewers and the primary viewers would be drivers passing by on Taylor Road, it is not anticipated that the new Taylor Road connection would result in negative visual impacts. However, the relocated access to Stonehouse Court would bring that roadway in closer proximity to the church where a parking area previously existed. This may or may

not be viewed negatively if a reduction in the number of parking stalls is of importance to this business and its employees. Removal of vegetation along the parking lot may be viewed negatively, though, because of the aesthetic value it provides. In addition, Alternative 1 would result the largest reduction in Cattlemens' restaurant and Enterprise Rent-A-Car's parking areas, which would likely be perceived negatively by these affected businesses.

In general, alteration of the parking and planting areas associated with businesses along Taylor Road would negatively affect the existing visual character of commercial and institutional highway neighbors. Implementation of Mitigation Measures 2, *Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix*, and 3, *Implement Interchange and Slope Landscaping and Visual Buffers*, would reduce these impacts by creating seasonal visual interest, re-landscaping affected areas, and re-planting visual buffers between sensitive viewers.

Viewer Response

The viewer response under Alternative 1 would be the same as described above for "Alternatives 1, 2, and 3".

Resource Change

The resource change under Alternative 1 would be the same as described above for "Alternatives 1, 2, and 3".

Alternatives 2 and 3

Construction

Construction impacts under Alternatives 2 and 3 would be the same as described above for "Alternatives 1, 2, and 3". The primary difference between these alternatives and Alternative 1 is that these alternatives would require slightly less vegetation removal near the Cattlemens restaurant and Enterprise Rent-A-Car parking areas, less take and demolition of Cattlemens' restaurant and Enterprise Rent-A-Car's parking areas, the Taylor Road connection would not be built, and Stonehouse Court would not be realigned. However, because of the overall scale of construction associated with these alternatives, it is not likely that these slight reductions in construction would result in a reduction in the overall visual impacts associated with construction when compared to Alternative 1.

Operation

Operational impacts under Alternatives 2 and 3 would be the same as described above for "Alternatives 1, 2, and 3". The I-80/SR 65 connectors and structures over I-80 would be slightly less visible under this alternative because there would be slightly less vegetation removal near Cattlemens restaurant, Roseville Yamaha, and Enterprise Rent-A-Car. In addition, Alternatives 2 and 3 would result a smaller reduction in the Cattlemens' restaurant and Enterprise Rent-A-Car's parking areas, compared to Alternative 1. Therefore, Alternatives 2 and 3 would have slightly less impact upon visual resources within this visual assessment unit, when compared to Alternative 1, because slightly more vegetation and parking area would be preserved. However, any visual impacts on these parking areas and the surrounding vegetation are likely to be perceived negatively by affected businesses.

In general, alteration of the parking and planting areas associated with businesses along Taylor Road would negatively affect the existing visual character of commercial and institutional highway neighbors. Implementation of Mitigation Measures 2, *Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix*, and 3, *Implement Interchange and Slope Landscaping and Visual Buffers*, would reduce these impacts by creating seasonal visual interest, re-landscaping affected areas, and re-planting visual buffers between sensitive viewers.

Viewer Response

The viewer response under Alternatives 2 and 3 would be the same as described above for “Alternatives 1, 2, and 3”.

Resource Change

The resource change under Alternatives 2 and 3 would be the same as described above for “Alternatives 1, 2, and 3”.

SUMMARY OF VISUAL IMPACTS BY VISUAL ASSESSMENT UNIT AND ALTERNATIVE

Construction and operation impacts for Alternatives 1–3 are described above. The table below summarizes and compares the narrative ratings for visual resource change, viewer response, and visual impacts between alternatives for each visual assessment unit and associated key views, if applicable.

Table 32. Summary of Key View Narrative Ratings					
Visual Assessment Unit	Key View	Alternative	Resource Change	Viewer Response	Visual Impact
I-80 Corridor	1a	1	ML	H	MH
	2a	1	ML	MH	M
	1b	2	M	H	MH
	2b	2	L	MH	M
	1c	3	ML	H	MH
	2b	3	L	MH	M
SR 65 Corridor	3	1, 2, and 3	L	MH	M
Open Space	4	1, 2, and 3	L	MH	M
Residential	N/A	1, 2, and 3	L	H	M
Commercial/Institutional	N/A	1, 2, and 3	L	MH	M

Impacts from each alternative would be comparable; therefore, the summary has been condensed into a singular discussion and a detailed comparison is not provided. As identified and described earlier in this section, each of the three build alternatives would include similar widening of I-80, SR 65, and the East Roseville Viaduct; the reconfigured, taller and more complex I-80/SR 65 connectors that are similar in configuration and height; similar HOV lanes and lane barriers; similar retaining wall structures; widened bridges over I-80 and on- and off-ramps for I-80 and SR 65 that are similar; and associated vegetation removal that is similar. The primary difference between the three alternatives is that Alternative 1 would have the relocated Taylor Road connection that crosses under I-80 and removes the existing Taylor Road on- and off-ramps; Alternative 2 would have a slightly more complex exit system to access I-80/SR 65 connectors, would retain and reconfigure the existing Taylor Road off-ramp from eastbound I-80 and the Taylor Road on-ramp to westbound I-80; and Alternative 3 would not have a Taylor Road connection. However, the elements that would result in the greatest visual impact would be the I-80/SR 65 connectors, widened viaduct, and vegetation removal and all of these changes would, generally, appear visually similar amongst the alternatives. The I-80/SR 65 connectors would appear to dominate the landscape when viewers are in closer proximity to the interchange, versus being farther away, and the connector system would result in a greater visual change when seen on the eastbound approach, versus on the westbound approach, as seen by comparing Simulated Conditions for Key Views

1 and 2. During construction, all alternatives would remove native oak trees, riparian vegetation, and ornamental trees and shrubs. Alternative 1 would have slightly more vegetation removal because of the design of the Taylor Road connection. The Cities would require that all alternatives include planting replacement trees, implementation of a revegetation plan, or an in-lieu payment into tree preservation funds to mitigate these impacts.

X. PROJECT VISUAL IMPACTS SUMMARY

The project visual impacts summary is provided under *Summary of Visual Impacts by Visual Assessment Unit and Alternative*, above.

Temporary Construction Visual Impacts

Temporary visual impacts resulting from construction were described earlier in this section. Please refer to those sections for more detail.

XI. CUMULATIVE VISUAL IMPACTS

Cumulative impacts are those resulting from past, present and reasonably foreseeable future actions, combined with the potential visual impacts of this project. For this project, it has been determined that the following cumulative visual impacts may occur. The combined visual effect of this proposed project and other development projects planned, recently in construction, or currently in construction would change the visual character of the region. As described in the *Community Impact Assessment*, Roseville and Rocklin General Plans and the Placer County Regional Transportation Plan will contribute to growth and development within and surrounding the project area (Caltrans 2014b). These plans, once implemented, will expand and improve existing and create new and reconfigured transportation corridors and induce development and infill of open space areas and vacant lots within the project vicinity. These plans will also allow for continued growth and development to occur around the project area.

The proposed project is driven by implementation of the plans described above, to provide access and to support future land uses in the vicinity, and all three proposed alternatives would result in the same cumulative visual impacts. Temporary construction impacts associated with the proposed project would result in cumulative visual impacts because they would be long-term and compound the visual presence of construction in the area, especially when factored with other larger scale development and transportation projects. Planned development and transportation projects would also alter the existing visual character of the area in the long-term and affect the area's visual character, including the open space areas and vacant lots located in the project vicinity. Development in the project vicinity would contribute to changes in the visual quality of views as seen from all visual assessment units. Roadway users, residents, businesses, and recreationists will be able to see open space areas and vacant lots within the landscape gradually transition and infill to industrial, mixed-use, commercial, and residential development and this development will include the associated transportation and utility infrastructure needed to support it. Other large-scale transportation projects would widen segments of I-80, SR 65, and local connectors and create larger roadways, such as the Placer Parkway project that would widen nearby segments of SR 65 and Whitney Ranch Parkway, and widening associated with the I-80/SR 65 project would contribute to cumulative visual impacts by replacing narrower with wider highways and impacting associated vegetation and viewers. Future development and roadway improvements would also add to ambient atmospheric lighting and glare in the area by infilling unlit open space areas with lit buildings and roadways and by adding reflective surfaces to an area that is currently undeveloped. The proposed project, however, would only have an incremental contribution to cumulative impacts

associated with lighting, because highway lighting would not greatly increase as a result of the project. However, the project would contribute to visual changes related to planned and/or proposed development in the area because it would alter the existing visual landscape, degrade the visual quality of the project area, and negatively affect highway users and highway neighbors. Implementation of the mitigation measures below would reduce the project's impact on visual resources but not to a less than cumulatively considerable level. Therefore, the project's cumulative effects would be cumulatively considerable.

XII. AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Caltrans and the FHWA mandate that a qualitative/aesthetic approach should be taken to address visual quality loss in the project area. This approach fulfills the letter and the spirit of FHWA requirements because it addresses the actual cumulative loss of visual quality due to a project. This approach also results in avoidance, minimization, and/or mitigation measures that can lessen or compensate for a loss in visual quality. The inclusion of aesthetic features in the project design, discussed in *Section III*, can help generate public acceptance of a project. This section describes additional avoidance, minimization, and/or mitigation measures to address specific visual impacts. These will be designed and implemented with concurrence of the District Landscape Architect.

Avoidance and minimization measures are not proposed. The following mitigation measures to offset visual impacts will be incorporated into the project.

1. **Minimize Fugitive Light from Portable Sources Used for Construction.** At a minimum, the construction contractor shall minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights will be used. Portable lights will be operated at the lowest allowable wattage and height and will be raised to a height no greater than 20 feet. All lights will be screened and directed downward toward work activities and away from the night sky and highway users and highway neighbors, particularly residential areas, to the maximum extent possible. The number of nighttime lights used will be minimized to the greatest extent possible.
2. **Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix.** The project proponent will require construction contractors to incorporate native grass and wildflower seed to standard seed mixes, which may be non-native, for erosion control measures that will be applied to all exposed slopes. Wildflowers will provide seasonal interest to areas where trees and shrubs are removed and grasslands are disturbed. Only wildflower and grass species that are native will be incorporated into the seed mix, and under no circumstances will any invasive grass or wildflower plant species be used as any component in any erosion control measures. Species will be chosen that are indigenous to the area and for their appropriateness to the surrounding habitat. For example, upland grass and wildflower species will be chosen for drier, upland areas, and wetter species will be chosen for areas that will receive more moisture. If not appropriate to the surrounding habitat, wildflowers should not be included in the seed mix.
3. **Implement Interchange and Slope Landscaping and Visual Buffers.** Landscaping within interchange loops and on constructed earth slopes will improve the visual quality of the roadway corridor by improving corridor aesthetics and helping to reduce the apparent scale of new and reconfigured aerial connectors. Visual buffers will also be planted to replace or supplement existing visual buffers for visual assessment units bordering the I-80 and SR 65 Corridors that are impacted by the project. This landscaping will also serve as a buffer and screen against nuisance lighting resulting from oncoming vehicle headlights and roadway

lighting and help to prevent or greatly reduce nuisance lighting from affecting nearby sensitive viewers. Prior to approval of the roadway design, the Caltrans project landscape architect shall review project designs to ensure that the following elements are implemented in the project landscaping plan:

- One hundred percent of the species composition will reflect species that are native and indigenous to the Plan Area and California. Native plant species can be used to create attractive spaces, high in aesthetic quality, that are not only drought-tolerant but attract more wildlife than traditional landscape plant palettes. Use of native species promotes a visual character of California that is being lost through development and reliance on non-native ornamental plant species.
 - The species list will include trees, shrubs, and an herbaceous understory of varying heights, as well as both evergreen and deciduous types. Plant variety will increase the effectiveness of the roadside planting areas by providing multiple layers, seasonality, diverse habitat, and reduced susceptibility to disease. Evergreen groundcovers or low-growing plants, such as *Ceanothus* spp., should be used in areas where taller vegetation would potentially cause driving hazards by obscuring site distances.
 - Special attention should be paid to plant choices near residences to ensure that species chosen are of an appropriate height and rely on evergreen species to provide year-round light screening from nuisance light.
 - Under no circumstances will any invasive plant species be used at any location.
 - Vegetation shall be planted within the first six months following Project completion.
 - An irrigation and maintenance program will be implemented during the plant establishment period and carried on, as needed, to ensure plant survival. However, design of the landscaping plan will try to maximize the use of planting zones that are water efficient. The design may also incorporate aesthetic features, such as a cobbling swales or shallow detention areas, which can reduce or eliminate the need for irrigation in certain areas.
 - If an irrigation system is required, areas that are irrigated will use a smart watering system that evaluates the existing site conditions and plant material against weather conditions to avoid overwatering of such areas. To avoid undue water flows, the irrigation system will be managed in such a manner that any broken spray heads, pipes, or other components are fixed within 1–2 days, or the zone or system will be shut down until it can be repaired.
4. **Implement Project Design Aesthetics.** The project will implement an aesthetic design treatment with a consistent motif for new and reconfigured structures such as retaining walls, lane barriers, and connector system structures. Choosing earth-toned colors for the surfaces would be less distracting to viewers than light or brightly colored surfaces. The design motif applied to structures will reflect a combination of naturally colored surfaces and surfaces that are textured to appear as natural materials (e.g., rock or cobble) or that incorporates a design theme (e.g., wildlife and plants of local, native oak woodlands; traditional architectural elements such as inset panels; or other design reflecting local heritage or environment) using form liners. This would reduce visual monotony, soften verticality, reduce glare, and be more visually pleasing to viewers than plain surfaces for retaining walls, exterior facing barriers and girders on bridges that would be visible to traffic passing under the overcrossing, decking, abutments and side

supports, and columns. Local examples of such treatments include I-5/French Camp interchange in Stockton and SR 99/Sheldon Road overcrossing in Elk Grove. Non-local examples include Maryland 216 in Prince Georges County, Maryland; US 54/East Kellogg Drive and South Oliver Street Interchange, Wichita, Kansas; and Roberts Road Bridge in Los Gatos, California. Roughened retaining wall surfaces would soften the verticality of the wall faces by providing visual texture and reducing the amount of smooth surface that can reflect light. Furthermore, if possible, a plantable wall surface, such as a retaining wall structure that allows interstices for planting shall be evaluated for use as a possible best management practice to help introduce more landscaping. A local example includes the slopes east and west of the Rocklin Road/I-80 undercrossing. However, a plantable wall surface shall not be used if it would require more space and create a greater impact on adjacent visual assessment units. The shade of the wall will also be carefully considered. Studies have shown that structures 2 to 3 degrees darker than the color of the general surrounding area creates less of a visual impact than matching or lighter hues (U.S. Bureau of Land Management 2008). In general, very light buff/tan, brown, or gray colors stand out more than darker colors such as deep browns, deep red-browns, and deep warm grays that have the ability to complement the surrounding vegetation. Lane barriers coloring should complement project retaining walls and avoid using lightly colored concrete that appears to be white or greyish-white and, instead, use mid- to darker greys or tans to limit reflective glare.

5. **Apply Minimum Lighting Standards.** All overhead street lighting is to be limited to the minimum required for driver safety and shall be designed using Illuminating Engineering Society's design guidelines and in compliance with International Dark-Sky Association approved fixtures. All lighting is to cause minimum impact on the surrounding environment and shall utilize downcast, cut-off type fixtures that are shielded and direct the light only toward surfaces requiring illumination. Therefore, lights must be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties, open spaces, or backscatter into the nighttime sky. The lowest allowable wattage shall be used for all lighted areas and the amount of nighttime lights needed to light an area shall be minimized to the highest degree possible. Light fixtures shall have non-glare finishes that will not cause reflective daytime glare. Lighting shall be designed for energy efficiency, use high pressure sodium vapor lights with individual photocells, and have daylight sensors or be timed with an on/off program. Lights shall provide good color rendering with natural light qualities with the minimum intensity feasible for security, safety, and personnel access. Technologies to reduce light pollution evolve over time and design measures that are presently available may help, but may not be the most effective means of controlling light pollution once the project is designed. Therefore, all design measures used to reduce light pollution shall employ the technologies available at the time of project design to allow for the highest potential reduction in light pollution.
6. **Install Visual Barriers between Construction Work Areas and Sensitive Receptors.** The contractor shall install visual barriers to obstruct undesirable views of construction activities from sensitive receptors, namely residents and recreational areas that are located adjacent to the construction site. The visual barrier may be chain link fencing with privacy slats, fencing with windscreen material, wood or concrete barrier/soundwall, or other similar barrier. The visual barrier shall be a minimum of 6 feet high to help to maintain the privacy of residents and block long-term ground-level views toward construction activities. While this visual barrier would introduce a visual intrusion, it would greatly reduce the visual effects associated with visible construction activities and screening construction activities and protecting privacy is deemed desirable.

Summary of Avoidance, Minimization, and/or Mitigation Measures by Alternative

The table below summarizes the numbered avoidance, minimization, and/or mitigation measures from above for each alternative.

Table 33. Summary of Avoidance, Minimization, and/or Mitigation Measures by Alternative		
Alternative	Avoidance and Minimization	Mitigation
Alternatives 1, 2, and 3	None	<ol style="list-style-type: none"> 1. Minimize Fugitive Light from Portable Sources Used for Construction 2. Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix 3. Implement Interchange and Slope Landscaping and Visual Buffers 4. Implement Project Design Aesthetics 5. Apply Minimum Lighting Standards 6. Install Visual Barriers between Construction Work Areas and Sensitive Receptors

XIII. CONCLUSIONS

The proposed project would result in moderate to moderate-high visual changes to the project area that would result in adverse visual impacts and negatively impact existing viewer groups. Each of the three build alternatives would widen I-80, SR 65, the East Roseville Viaduct, and Taylor Road; introduce reconfigured, taller and more complex I-80/SR 65 connectors; new HOV lanes and lane barriers; retaining wall structures; widened bridges over I-80; modified and on- and off-ramps for I-80 and SR 65; reduction in commercial parking areas; and associated vegetation removal. The elements that would result in the greatest visual impact would be the I-80/SR 65 connectors, widened viaduct, and vegetation removal and all of these changes would, generally, appear visually similar amongst the alternatives. The alternatives could increase light and glare in the project area, if not properly designed. Implementation of the mitigation measures would reduce light impacts during construction and operation, reduce impacts on residences and sensitive receptors during construction, provide seasonal visual interest of grassland areas disturbed by construction, and improve project aesthetics through landscaping and hardscape design. The proposed project would be detrimental in adding to the cumulative visual impacts associated with construction and presence of built features, when factored with the continued growth and development of the area surrounding the proposed project.

XIII. REFERENCES

Written References

- Caltrans (California Department of Transportation). 2014a. *Officially Designated State Scenic Highways*. Available: <<http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm>>. Last updated: October 14, 2013. Accessed: April 2, 2014.
- 2014b. *I-80/SR 65 Interchange Improvements Project, Community Impact Assessment*. July 2014. Placer County, CA.
- City of Rocklin. 2014. *Chapter 17.77 OAK TREE PRESERVATION*. Available: <http://library.municode.com/HTML/16050/level2/TIT17ZO_CH17.77OATRPR.html#TIT17ZO_C17.77OATRPR_17.77.100OATRPRGU>. Accessed: April 7, 2014.
- 2012. *City of Rocklin General Plan*. Adopted: October 2012. Rocklin, CA.
- Federal Highway Administration. 1988. *Visual Impact Assessment FOR Highway Projects*. (FHWA-HI-88-054.) USDOT (US Department of Transportation), 1988.
- Fehr & Peers. 2014. *I-80/SR 65 Interchange Improvements Transportation Analysis Report*. May. Placer County, CA.
- City of Roseville. 2013a. *City of Roseville General Plan*. Updated: February 20, 2013. Roseville, CA.
- . 2013b. *North Central Roseville Specific Plan*. Adopted: July 5, 1990. Updated: December 16, 2013. Roseville, CA.
- . 2007. *Highland Reserve North Specific Plan*. Adopted: June 7, 1997. Updated: March 28, 2007. Roseville, CA.
- . 1996. *City of Roseville Tree Preservation Ordinance, City Code, Article 19.66*. Roseville, CA.
- Placer County. 2013. *Placer County Regional Transportation Plan 2035*. September. Available: <<http://pctpa.net/library/placer-county-2035-regional-transportation-plan-document/>>. Accessed: July 15, 2014.
- Sacramento Area Council of Governments. 2012. *Metropolitan Transportation Plan/Sustainable Communities Strategy 2035*. April 19. Available: <<http://www.sacog.org/2035/mtpscs/>>. Accessed: August 19, 2014.
- Smardon, R. C., J. F. Palmer, and J. P. Felleman. 1986. *Foundations for Visual Project Analysis*. John Wiley & Sons, Inc. New York, NY.
- URS Corporation. 2009. *Final Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report Final Tier 1 Section 4(f) Evaluation*. November. Prepared for South Placer Regional Transportation Authority, California Department of Transportation, and Federal Highway Administration. Sacramento, CA.

Personal Communications

- Bitter, Gregory. Principal Planner, Development Services—Planning Division. City of Roseville, Roseville, CA. June 2, 2014—Email.

