

3.1 Aesthetics

3.1.1 Introduction

This section describes the regulatory setting and environmental setting for aesthetic resources in the vicinity of the Proposed Project including all track variants, technology variants, and the Greenhouse and Mountain House initial operating segments (IOS) and the alternatives analyzed at an equal level of detail (i.e., the Southfront Road Station Alternative, Stone Cut Alignment Alternative, West Tracy Operation and Maintenance Facility [OMF] Alternative, Mountain House Station Alternative, and Downtown Tracy Station Parking Alternatives 1 and 2). It also describes the impacts on aesthetic resources that would result and mitigation measures that would reduce significant impacts, where feasible. Appendix J, *Supporting Aesthetics Information*, contains additional technical information for this section.

The study area for aesthetic resources, also referred to as the area of visual effect (AVE), is defined in Section 3.1.4.1, *Methods of Analysis*. Cumulative impacts on aesthetic resources, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, *Other CEQA-Required Analysis*.

3.1.2 Regulatory Setting

This section summarizes federal, state, regional, and local regulations related to aesthetic resources and applicable to the Proposed Project and the alternatives analyzed at an equal level of analysis.

3.1.2.1 Federal

There are no federally designated National Wild and Scenic Rivers (U.S. Fish and Wildlife Service 2019) or National Scenic Byways (Federal Highway Administration 2019) within the study area. No lands administered by the Bureau of Land Management would be affected (Bureau of Land Management 2019a and 2019b). No national parks or monuments are in the study area (National Park Service 2019). However, Juan Bautista de Anza National Historic Trail is in the study area.

Juan Bautista de Anza National Historic Trail

The Juan Bautista de Anza National Historic Trail would be crossed by the Proposed Project. The National Park Service is working toward establishing a continuous, 1,200-mile non-motorized recreation trail that will roughly follow the historic route of the Anza expedition of 1775–1776. Approximately 300 miles of recreation trail have been certified so far, with each segment independently operated (National Park Service 2018). The *Juan Bautista de Anza National Historic Trail Comprehensive Management and Use Plan* notes that its management objective is to “protect a trail ROW [right-of-way], to protect cultural and scenic resources along the trail, to foster public appreciation and understanding of the trail, to encourage facilities for resource protection and public information and use.” However, the plan acknowledges that many segments of the historic trail have been altered by the effects of urbanization and changing transportation systems, which are characteristic of the trail within the study area (National Park Service 1996).

The proposed Altamont Alignment would cross the historic trail corridor south of Interstate-580 (I-580). The auto route for the trail travels parallel to the proposed Altamont Alignment over a short segment on Midway Road, then crosses the proposed Altamont Alignment at Patterson Pass Road, near its intersection with Midway Road. Recreational trails, which are a part of the trail system, do not cross the proposed Altamont Alignment (Anza Trail Foundation 2019).

National Historic Preservation Act

The National Historic Preservation Act (NHPA), which is part of U.S. Code Title 16, Section 470 et seq., establishes federal government policy on historical preservation. Section 106 of the NHPA requires federal agencies to consider the effects of their undertakings on historic properties. Potential adverse effects include changes in the physical features of a property's setting that contribute to its historical significance or the introduction of visual elements that diminish the integrity of a property's significant historical features. Section 3.5, *Cultural Resources*, documents and analyzed impacts on historic properties, including visual changes that would affect such resources.

3.1.2.2 State

There are no state-designated Wild and Scenic Rivers within the study area (as defined by Public Resource Code Section 5093.54). Furthermore, there are no state parks within the study area (California State Parks 2019).

State Scenic Roadways and Highways

The California Department of Transportation (Caltrans) defines a scenic corridor as the "land that is visible from, adjacent to, and outside the highway right-of-way, and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries" (California Department of Transportation 2008). Designated scenic corridors are subject to protection, including regulations regarding land use, site planning, advertising, earthmoving, landscaping, and the design and appearance of structures and equipment.

As described in Caltrans' *Scenic Highway Guidelines*, highways can be nominated to be an eligible State Scenic Highway under Streets and Highways Code Section 263 when they are believed to have outstanding scenic values (California Department of Transportation 2008). Becoming an eligible State Scenic Highway does not require any legislative action. The following conditions must be met to nominate a route.

- The state or county highway is a scenic corridor with a memorable landscape that showcases the natural scenic beauty or agriculture of California.
- Existing visual intrusions do not significantly affect the scenic corridor.
- There is demonstration of strong local support for the proposed scenic highway designation.
- The length of the proposed scenic highway is not less than 1 mile and is not segmented.

Once a state route is identified as eligible under Streets and Highways Code Section 263, it may be nominated for official designation by the local governing body with jurisdiction over lands adjacent to the proposed scenic highway. Division 1, Chapter 2, Article 2.5, Sections 260 through 284, of the California State Streets and Highway Code establishes the following.

The standards for official scenic highways shall also require that local governmental agencies have taken such action as may be necessary to protect the scenic appearance of the scenic corridor, the band of land generally adjacent to the highway right-of-way, including, but not limited to, (1) regulation of land use and intensity (density) of development, (2) detailed land and site planning, (3) control of outdoor advertising, (4) careful attention to and control of earthmoving and landscaping, and (5) the design and appearance of structures and equipment.

A route may be removed for consideration as a scenic route or taken out of the State Scenic Highways program when there has been significant degradation of scenic quality due to visual intrusions and changes in visual character. Examples of visual intrusions that would degrade scenic corridors, as stipulated by Caltrans, and would apply to the Proposed Project and the alternatives analyzed at an equal level of detail include extensive cut and fill, scarred hillsides and landscapes, steep slopes with little or no vegetation, exposed and unvegetated earth, and a scale and appearance for the roadway that would be incompatible with the landscape. Unsightly land uses would include actions that would result in these conditions (California Department of Transportation 2008).

Officially designated and eligible State Scenic Highways that are within 3 miles of the study area are included in Table 3.1-1 (California Department of Transportation 2019a). All these highways, both designated and eligible, are considered in this analysis.

Table 3.1-1. Officially Designated and Eligible State Scenic Highways within 3 Miles of the Study Area

County	Route	Designation	Post Mile Limits	Segment Description
Alameda	I-580	OD (E) ^a	0.0–0.4 (0.0–47.4)	From San Joaquin county line to SR 205 (San Joaquin county line to I-80)
	I-680	OD	16.8–21.9	From Bernal Avenue near Pleasanton to the Contra Costa county line
San Joaquin	I-580	OD (E)	0.0–15.4 (0.0–15.4)	From I-5 to the Alameda county line (same)

Notes:

^a OD (E) signifies that the routes were eligible and then all, or portions, of the segments became officially designated. However, Caltrans retains the original start and end post miles on the eligible list until the text within the Streets and Highways Code is revised by the legislature to remove the text describing eligible segments that have become officially designated (Justine pers. comm.) Therefore, the post miles for each are included in this table.

E = Eligible

I = Interstate; SR = State Route

OD = Officially Designated

Source: California Department of Transportation 2019a

Several segments of landscaped freeways are within view of the scenic corridor (California Department of Transportation 2020). Freeway segments within 3 miles in rural settings and within 0.5 mile in urban areas of the scenic corridor are considered in this analysis and indicated in Table 3.1-2.

Table 3.1-2. Designated Landscaped Freeways Potentially in View of the Study Area

County	Freeway	Freeway Segment (Post Mile Limits)
Alameda	I-580	10.22/10.82
		13.17/13.41
		14.97/15.63
		17.55/18.31

County	Freeway	Freeway Segment (Post Mile Limits)
		18.54/19.12
		19.76/19.96
		20.14/20.39

Sources: California Department of Transportation 2020; California Department of Transportation 2019b.

Caltrans defines a classified landscaped freeway as “a section of freeway with ornamental vegetation planting that meets the criteria established by the California Code of Regulations (Cal. Code Regs.), Outdoor Advertising Regulations, Title 4, Division 6. This designation is used in the control and regulation of outdoor advertising displays.” As identified in Cal. Code Regs., Title 4 Sections 2507 and 2508, a classified landscaped freeway must have planting areas that are at least 1,000 feet in length, with healthy plantings that improve the aesthetic appearance of the highway. Functional plantings (i.e., plantings for erosion control, traffic safety, reducing fire hazards, traffic noise abatement, other non-ornamental purposes) do not qualify. The placement of advertising is prohibited within 660 feet of the edge of the right-of-way of a landscaped freeway (California Department of Transportation 2020).

3.1.2.3 Regional and Local

Appendix I, *Regional Plans and Local General Plans*, lists applicable goals, policies, and objectives from regional and local plans of the jurisdictions in which the Proposed Project and the alternatives analyzed at an equal level of detail are proposed. Section 15125(d) of the (CEQA) Guidelines requires an environmental impact report (EIR) to discuss “any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans.” These plans were considered during preparation of this analysis and reviewed to assess whether the Proposed Project and the alternatives analyzed at an equal level of detail would be consistent¹ with the plans of relevant jurisdictions. The Proposed Project and the alternatives analyzed at an equal level of detail would be generally consistent with the applicable goals, policies, and objectives related to aesthetic resources identified in Appendix I.

There are several county- and city-designated scenic routes within view of the Valley Link corridor. Scenic routes within 3 miles in rural settings and within 0.5 mile in urban areas of the corridor are considered in this analysis and indicated in Table 3.1-3.

The *City of Livermore General Plan* prescribes a means to analyze visual impacts on city-designated scenic routes that occur within different subareas along I-580 (City of Livermore 2004). These parameters are used to help determine impacts on Livermore scenic routes found in the analysis under Impact AES-4.

¹ An inconsistency with regional or local plans is not necessarily considered a significant impact under CEQA, unless it is related to a physical impact on the environment that is significant in its own right.

Table 3.1-3. County- and City-Designated Scenic Routes Potentially in View of the Proposed Project

County or City	Roads
<i>Alameda County</i>	I-580 I-680 Tassajara Road Doolan Road Collier Canyon Road North Livermore Avenue Vasco Road Altamont Pass Road Greenville Road West Grant Line Road Flynn Road Patterson Pass Road
Dublin	Includes all County-designated roadways plus Fallon Road
Livermore	Includes all County-designated roadways plus Isabel Avenue
Pleasanton	None
<i>San Joaquin County</i>	I-580
Tracy and Lathrop	None

3.1.3 Environmental Setting

Aesthetic analysis involves specialized terminology. For descriptions of several such terms used throughout Section 3.1.3, please see subsection 3.1.4.1, *Methods for Analysis*, as well as Appendix J.

3.1.3.1 Tri-Valley Segment

The Tri-Valley segment would be in the cities of Dublin, Pleasanton, and Livermore plus unincorporated portions of Alameda County. In Dublin and Pleasanton, land uses would consist of suburban residential, commercial, institutional (schools and a community library), and recreational (parks and fairgrounds) uses as well as open space. In Livermore, land uses would consist of industrial, warehouse, and recreational (park) uses. Views to the Altamont Hills, Black Hills, Diablo Range, and Pleasanton Ridge are valued in the region, as evidenced by the policies found within the local general plans that protect these resources (refer to Appendix J).

Tri-Valley Alignment and Dublin/Pleasanton Station

Existing Visual Resources

The most important visual resources within the viewshed of the Tri-Valley Alignment and Dublin/Pleasanton Station, based on analysis of aerial and satellite mapping, site surveys, and policy documents, include the following.

- **Altamont Hills, Black Hills, Diablo Range, and Pleasanton Ridge:** The grassy hillsides and distant oak woodlands of these features are visible from I-580.
- **I-580, Tassajara Road, Fallon Road, Doolan Road, Collier Canyon Road, Isabel Avenue, North Livermore Avenue, Vasco, Road, Altamont Pass Road, and Greenville Road:** These are state-, city-, and county-designated scenic routes with views of the segment (Appendix J). However, portions of the routes adjacent to I-580 are not particularly scenic because of existing commercial and industrial development, including Tassajara Road, Isabel Avenue, North Livermore Avenue south of I-580, Vasco Road, and Greenville Road (south of I-580).
- **Brushy Peak Regional Preserve:** Preserve area north of I-580.
- **Northfront Park:** Park adjacent to I-580.
- **Doolan Canyon:** An open space area north of I-580.
- **Tassajara Creek:** A waterway crossing under I-580 that has riparian vegetation north of I-580.
- **Tri-Valley Golf Center and Las Positas Golf Course:** Recreational areas bordering I-580.
- **Unnamed Water Detention Ponds:** The ponds are north of I-580, adjacent to the termini of Grafton Street and Northside Drive. Although these ponds are enclosed, they are in a park-like setting and connected by natural-looking channels.

Viewer Groups and Existing Viewer Sensitivity

Viewer groups within the segment include Bay Area Rapid Transit (BART) riders, recreationists who use local roadways and recreational areas adjacent to I-580, travelers on I-580 and local roadways, and commercial and residential viewers bordering I-580 (Appendix J, Table J-1.7).

Existing Visual Character and Quality

The natural environment comprises the flatter grassy open space areas of the valley; residential, commercial, and industrial landscaping; streetscapes; and the rolling terrain and grassy hillsides of the lower Altamont Hills, including a few scattered oak trees and shrubs. The South Bay Aqueduct is to the east and permanently filled with water. Atmospheric visibility can range from *moderately high* to *moderate* because of natural weather patterns, which can include seasonal haze, rain, and overcast conditions. The existing natural setting is harmonious and contributes to the cultural setting, resulting in *moderately high* natural harmony.

The cultural environment consists of mostly the business parks and commercial areas along I-580 between Santa Rita/Tassajara Road and Hopyard/Dougherty Road, an existing segment of BART within the I-580 median that terminates just east of Hacienda Drive, and the residential and commercial land uses south of I-580 between Isabel Avenue and First Street and north of I-580, on either side of Vasco Road. Industrial and warehouse development is south of I-580 between First Street and an area just east of Greenville Road, along the lower foothills of the Altamont Hills. This eastern border of Livermore is described in more detail under Greenville Station.

I-580 is a prominent transportation corridor that bridges existing roadways and tracks. Local roadways, aboveground utility infrastructure (e.g., utility poles with lines), and fencing also contribute to the cultural environment. In addition, wind turbines line the ridgelines of the Altamont Hills and can be seen in the middleground and background. Although the wind turbines are prominent and detract slightly from views, they create visual interest and do not overwhelm the

cultural landscape. The industrial areas and infrastructure are disjointed and detract from the nearby suburban setting and cultural setting, resulting in *moderate* cultural order.

The environment consists of the I-580 corridor, the double-track rail segments associated with the BART corridor that terminates east of Dublin/Pleasanton Station, and the Alameda County Transportation Corridor right-of-way that has no tracks and lies east of Greenville Road and travels north-south until heading east into the Altamont Hills. The existing environment is compatible with the natural and cultural environments and provides quality views to the nearby hills, resulting in *moderately high* site coherence.

The overall visual quality of the Tri-Valley Alignment and Dublin/Pleasanton Station is *moderately high*.

Light and Glare

Daytime light and glare levels associated with the Tri-Valley Alignment and Dublin/Pleasanton Station are *moderately high* because of the suburbanized and industrial setting and the grassy hillsides, with few trees to help shade and reduce glare. Nighttime light and glare levels are also *moderately high* because of lighting along I-580 and local roadways, vehicle headlights, and light coming from developed areas in the vicinity.

Isabel Station

The existing visual resources, viewer groups and viewer sensitivity, visual character and quality, and light and glare for Isabel Station would be like the elements described above for the Tri-Valley Alignment and Dublin/Pleasanton Station. The primary difference is that Isabel Station would be immediately south of I-580 and east of Isabel Avenue. Additional important visual resources within the viewshed include the following.

- **Arroyo Las Positas:** A waterway crossing under Isabel Avenue and south of I-580 that has riparian vegetation.
- **G&M Farms:** A popular seasonal farm (typically open to the public only in the fall) that features a cornfield maze and pumpkin patch.
- **Hills of Doolan and Collier Canyons:** Hilly area north of I-580 that contributes to scenic views.

Viewer groups and viewer sensitivity, visual character and quality, and light and glare would be consistent with the elements in the eastern portion of the segment described above for the Tri-Valley Alignment and Dublin/Pleasanton Station. The main differences are that the site is bounded by I-580 and Isabel Avenue to the north and west, and business parks and G&M Farms border the site to the south and east. Additionally, this site is large and mostly vacant, with riparian vegetation along Arroyo Las Positas, and G&M Farms creates small open space areas in an area that is largely developed. The rolling hills north of the existing development and north of I-580 are prominent in middleground views.

Southfront Road Station Alternative

The visual resources, viewer groups and viewer sensitivity, visual character and quality, and light and glare for the Southfront Road Station Alternative would be like the elements described above for the Tri-Valley Alignment and Dublin/Pleasanton Station. The primary difference is that the Southfront Road Station Alternative would be immediately south of I-580, between First^{Street} and

Vasco Road. There are no additional important visual resources within the viewshed, other than those described for the Tri-Valley Alignment and Dublin/Pleasanton Station.

Viewer groups and viewer sensitivity, visual character and quality, and light and glare are consistent with the elements in the eastern portion of the segment described above for the Tri-Valley Alignment and Dublin/Pleasanton Station. The main difference is that the site is bounded by I-580 and Southfront Road, a freeway frontage road, and industrial storage yards. An isolated residence is located just west of the site. The large, mostly vacant site creates small open space areas in an area that is largely developed. The site contains a steel-lattice transmission tower and a row of trees along its southern border.

Greenville Station

Existing Visual Resources

The most important visual resources within the viewshed of Greenville Station, based on analysis of aerial and satellite mapping, site surveys, and policy documents, include the following.

- **Altamont Hills:** The grassy hillsides are visible from the existing rail corridor and local roadways.
- **I-580, Patterson Pass Road, Altamont Pass Road, Greenville Road, and Flynn Road:** I-580 is a state- and Alameda County–designated scenic route; Patterson Pass Road, Altamont Pass Road, Greenville Road, and Flynn Road are Alameda County–designated scenic routes with views of the Proposed Project (Appendix J). However, Greenville Road immediately south of I-580 is not particularly scenic because of existing commercial and industrial development.
- **Brushy Peak Regional Preserve:** Preserve area north of I-580.

Viewer Groups and Existing Viewer Sensitivity

Viewer groups of the Greenville Station include Altamont Corridor Express (ACE) riders, recreationists who use local roadways, travelers on local roadways, and viewers at two single-family residential units (Appendix J, Table J-1.7).

Existing Visual Character and Quality

Greenville Station is north of I-580 between the South Bay Aqueduct and Greenville Road, just outside the city of Livermore’s boundaries, and within Alameda County and south of I-580 in the city of Livermore. The adjacent natural environment comprises the rolling terrain and grassy hillsides of the lower Altamont Hills, including a few scattered oak trees and shrubs. The South Bay Aqueduct is located to the east and permanently filled with water. Atmospheric visibility can range from *moderately high* to *moderate* because of natural weather patterns, which can include seasonal haze, rain, and overcast conditions. However, the existing natural setting associated with the station site is disharmonious due to terrain modifications to accommodate the freeway and an isolated patch of trees, but landscape scarring from the Club Moto Motocross Track, prominent freeway infrastructure, and the presence of a number of aboveground utilities detract from the natural setting, resulting in *moderately low* natural harmony.

The adjacent cultural environment consists of scattered industrial land uses on the lower foothills between the aqueduct and Greenville Road, industrial and warehouse development west of Greenville Road, and the Club Moto Motocross Track between Altamont Pass Road and I-580. These

uses create visible scarring on the landscape. One single-family rural residence is located 0.5 mile east of the aqueduct, north of Flynn Road. I-580 is a prominent transportation corridor that bridges existing tracks. Local roadways, aboveground utility infrastructure (e.g., wooden utility poles with lines), and fencing also contribute to the cultural environment. In addition, wind turbines line nearby ridgelines and can be seen in the middleground. Although the wind turbines are prominent and detract slightly from views, they create visual interest and do not overwhelm the cultural landscape. In addition, the concrete-lined South Bay Aqueduct is screened terrain and not prominent in the landscape. The cultural environment associated with the station site is dominated by freeway and utility infrastructure that is disjointed and detracts from the cultural setting, resulting in *moderate* cultural order.

The project site environment consists of connections to existing single-track segments, except east of Greenville Road where they connect to an existing double track that converges to a northbound single track. The project site environment also consists of grassy hillsides and industrial areas, which would be modified by the Greenville Station. The existing environment is somewhat compatible with the natural and cultural environments, resulting in *moderate* site coherence.

The overall visual quality of the Greenville Station is *moderately low*.

Light and Glare

Daytime light and glare levels associated with Greenville Station are *moderately low* because there is little development and the grassy hills, with few trees to help shade and reduce glare. Nighttime light and glare levels are also *moderately low* because, although passing passenger trains have interior lighting, the adjacent tracks are not lit; however, vehicle headlights, lighting along I-580 and local roadways, and light coming from the eastern edge of Livermore act to slightly increase lighting in the vicinity.

3.1.3.2 Altamont Segment

The Altamont segment starts east of Livermore, then travels through the rolling, grassy terrain of the Altamont Hills to the western edge of Tracy where the proposed rail alignment would transition to the flat valley floor. The predominant land use is open space and agriculture through the Altamont Hills, with industrial land uses along I-580. In addition, wind farms on the grassy hillsides are notable in the landscape. Views to the Altamont Hills are valued in the region, in addition to background views of the Sierra Nevada.

Altamont Alignment

Existing Visual Resources

The most important visual resources in the viewshed of the Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track), based on analysis of aerial and satellite mapping, site surveys, and policy documents, include the following.

- **Altamont Hills, Diablo Range, and Sierra Nevada:** The grassy hillsides of the Altamont Hills, oak woodlands of the Diablo Range, and the snow-capped mountains of the Sierra Nevada are visible from the rail corridor in areas where elevation and breaks in development and vegetation allow for views.

- **I-580, Altamont Pass Road, and Patterson Pass Road:** I-580 is an eligible and officially designated State Scenic Highway and San Joaquin County–designated scenic route; Altamont Pass Road and Patterson Pass Road are county-designated scenic routes with views of the Altamont Alignment (Appendix J).
- **California Aqueduct Bikeway:** Trails and a recreational area with views of the existing and proposed rail line.

Viewer Groups and Existing Viewer Sensitivity

Viewer groups for the Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track), include rail users, recreationists who use local roadways, travelers on local roadways, businesses near I-580, viewers at several single-family residential units along Altamont Pass Road between Carroll Road and the Altamont Landfill entrance, viewers along Patterson Pass Road between Midway Road and I-580, and viewers along Hansen Road near the eastern terminus of the segment (Appendix J, Table J-1.7).

Existing Visual Character and Quality

The Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track), would parallel Altamont Pass Road from Carroll Road until passing under I-580 near the existing rail underpass and overpass. The natural environment is dominated by rolling terrain and grassy hillsides, with a few scattered oak trees and shrubs. Altamont Creek is a seasonal water feature that is intermittently visible during the wet season. Atmospheric visibility can range from *moderately high* to *moderate* because of natural weather patterns, which can include seasonal haze, rain, and overcast conditions. The existing natural setting is harmonious because of the predominance of the environment, resulting in *moderately high* natural harmony.

The cultural environment is dominated by the natural environment, although there are several single-family rural residences east of Altamont Pass Road and Patterson Pass Road. Local roadways, aboveground utility infrastructure (e.g., wooden utility poles with lines), and barbed-wire fencing also contribute to the cultural environment. In addition, wind turbines line nearby ridgelines and can be seen in the middleground. Although the wind turbines are prominent and detract slightly from views, they create visual interest and do not overwhelm the cultural landscape. The low level of development and infrastructure results in a cultural order that is *moderately high*.

The project site environment consists of the curvilinear Alameda County Transportation Corridor right-of-way, which has no tracks and generally parallels Altamont Pass Road before passing under I-580. The transportation corridor then winds through the hillsides before paralleling Patterson Pass Road. The Altamont Alignment would cross grasslands and a gravel access road between the existing track and Altamont Pass Road. There is no visual screening between the existing track and Altamont Pass Road, I-580, and Patterson Pass Road. The existing project site environment responds to and is compatible with both the rural natural and cultural environments, resulting in *moderately high* site coherence.

The overall visual quality of the Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track) is *moderately high*.

Light and Glare

Daytime light and glare levels associated with the Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track) are *low* because of the more naturalized, vegetated setting, and because the existing tracks pass only one residence. Trees and shrubs also help to reduce glare. Nighttime light and glare levels are also *low* because, although passing ACE passenger trains have interior lighting, the tracks are not lit; the area surrounding the tracks is more naturalized, with only a few residences to contribute to illuminating the corridor.

Stone Cut Alignment Alternative

Existing Visual Resources

The most important visual resources in the viewshed of the Stone Cut Alignment Alternative, based on analysis of aerial and satellite mapping, site surveys, and policy documents, include the following.

- **Altamont Hills, Diablo Range, and Sierra Nevada:** The grassy hillsides of the Altamont Hills, oak woodlands of the Diablo Range, and the snow-capped mountains of the Sierra Nevada are visible from the rail corridor in areas where elevation allows for views.
- **I-580 and Altamont Pass Road:** I-580 is an eligible and officially designated State Scenic Highway and San Joaquin County–designated scenic route; Altamont Pass Road is a county-designated scenic route with views of the Stone Cut Alignment Alternative (Appendix J).

Viewer Groups and Existing Viewer Sensitivity

Viewer groups for the Stone Cut Alignment Alternative include rail users, recreationists who use local roadways, and travelers on local roadways and I-580 (Appendix J, Table J-1.7).

Existing Visual Character and Quality

The Stone Cut Alignment Alternative would parallel Altamont Pass Road for a short distance until passing under I-580, south of the of the existing tunnel and immediately north of the existing rail underpass and overpass. The natural environment is dominated by rolling terrain and grassy hillsides, with a few scattered oak trees and shrubs. Altamont Creek is a seasonal water feature that is intermittently visible during the wet season. Atmospheric visibility can range from *moderately high* to *moderate* because of natural weather patterns, which can include seasonal haze, rain, and overcast conditions. The existing natural setting is fairly harmonious because of the predominance of the environment, resulting in *moderately high* natural harmony.

The cultural environment is dominated by the natural environment. However, infrastructure associated with I-580 and the existing rail underpass and overpass, local roadways, aboveground utility infrastructure (e.g., wooden utility poles with lines), and barbed-wire fencing contribute to the cultural environment. In addition, wind turbines line nearby ridgelines and can be seen in the foreground. Although the wind turbines are prominent and detract slightly from views, they create visual interest and do not overwhelm the cultural landscape. The low level of development and infrastructure results in a cultural order that is *moderately high*.

The project site environment lies between the curvilinear Union Pacific Railroad (UPRR) that is used by the ACE commuter rail line that travels through the hills and over and under I-580 and the Alameda County Transportation Corridor right-of-way that has no tracks and tunnels under I-580.

The Stone Cut Alignment Alternative would connect to the Alameda County Transportation Corridor right-of-way at each end, cross grasslands, and then parallel the UPRR immediately north of the existing tracks. There is no visual screening between the existing track and Altamont Pass Road and I-580. The existing project site environment responds to and is compatible with both the rural natural and cultural environments, resulting in *moderately high* site coherence.

The overall visual quality of the Stone Cut Alignment Alternative is *moderately high*.

Light and Glare

Daytime light and glare levels associated with the Stone Cut Alignment Alternative are *low* because of the more naturalized and vegetated setting. Nighttime light and glare levels are also *low* because, although passing ACE passenger trains have interior lighting, the tracks are not lit; the area surrounding the tracks is more naturalized, with only vehicles driving along Altamont Pass Road and I-580 contribute to illuminating small portions the corridor.

Interim OMF

Existing Visual Resources

The most important visual resources within the viewshed of the Interim OMF, based on analysis of aerial and satellite mapping, site surveys, and policy documents, include the following.

- **Altamont Hills:** The grassy hillsides of the Altamont Hills are visible on either side of Altamont Pass Road and the Interim OMF.
- **Altamont Pass Road:** Altamont Pass Road is a county-designated scenic routes with views of the Interim OMF (Appendix J).

Viewer Groups and Existing Viewer Sensitivity

Viewer groups for the Interim OMF include rail users, recreationists who use local roadways, travelers on local roadways, the CoyBilt custom car restoration and build shop in the old Summit Garage building (CoyBilt 2019a, 2019b), and viewers at three single-family residential units south of Altamont Pass Road (Appendix J, Table J-1.7).

Existing Visual Character and Quality

The Interim OMF would be located north of Altamont Pass Road, between the roadway and existing railway tracks, and between Dyer Road and the entrance to the Altamont Landfill. The natural environment is dominated by rolling terrain and grassy hillsides, with a few scattered oak trees and shrubs. Atmospheric visibility can range from *moderately high* to *moderate* because of natural weather patterns, which can include seasonal haze, rain, and overcast conditions. The existing natural setting is harmonious because of the lack of development, resulting in *moderately high* natural harmony.

The cultural environment is dominated more by the natural environment, although there are several single-family rural residences south of Altamont Pass Road. Local roadways, aboveground utility infrastructure (e.g., wooden and steel utility poles with lines), and no-climb wire and barbed-wire fencing also contribute to the cultural environment. The low level of development and infrastructure results in a cultural order that is *moderately high*.

The project site environment consists of two vacant parcels of land that are split by a dirt road. The parcels include grass and ruderal vegetation, along with several mature shrubs and approximately

three mature trees. The parcels also contain a gravel lot area where inoperable and partially dismantled vehicles are currently parked. An old storage structure is located just west of the Interim OMF site. There is little visual screening between the Interim OMF site and Altamont Pass Road. The existing project site environment responds to and is compatible with both the rural natural and cultural environments; however, the parked vehicles detract from views, resulting in *moderate* site coherence.

The overall visual quality of the Interim OMF is *moderately high*.

Light and Glare

Daytime light and glare levels associated with the Interim OMF are *low* because of the more naturalized vegetated setting and because there are only three nearby residences. Trees and shrubs also help to reduce glare. Nighttime light and glare levels are also *low* because, although passing ACE passenger trains have interior lighting, the tracks are not lit; the area surrounding the tracks is more naturalized, with only a few residences to contribute illumination in the corridor.

Mountain House Station and West Tracy OMF Alternative

Visual resources, viewer groups and viewer sensitivity, visual character and quality, and light and glare for Mountain House Station and the West Tracy OMF Alternative are like the elements described above for the Altamont Alignment. The primary difference is that Mountain House Station would be located just west of I-580 and south of Patterson Pass Road, next to the Musco Family Olive Company. The West Tracy OMF Alternative would be located west of the proposed Mountain House Station, closer to the nearby residential viewers. However, terrain and the winding nature of Patterson Pass Road prevent full views of both sites together. In addition to the olive manufacturing company, industrial land uses line the east side of I-580. The terrain at these sites is gently rolling.

Viewer groups and viewer sensitivity, visual character and quality, and light and glare are consistent with the elements in the eastern portion of the segment described under Altamont Alignment.

Mountain House Station Alternative and Tracy OMF

Visual resources, viewer groups and viewer sensitivity, visual character and quality, and light and glare for the Mountain House Station Alternative and Tracy OMF are like the elements described above for the Altamont Alignment. The primary difference is that the Mountain House Station Alternative would be located just east I-580, off Hansen Road, and south of industrial land uses. Two residences are located near the station, one immediately to the south and one immediately to the east. The Tracy OMF would be located east of the proposed Mountain House Station Alternative on agricultural lands, which also border the site to the north and west. Commercial, warehouse, and manufacturing land uses are located immediately east of the Tracy OMF site, in addition to being located to the north, intermixed within agricultural lands. Industrial storage yards are also located south of the proposed station alternative, across the California Aqueduct. The terrain at these sites is flat.

Viewer groups and viewer sensitivity, visual character and quality, and light and glare are consistent with the elements in the eastern portion of the segment described under Altamont Alignment.

3.1.3.3 Tracy to Lathrop Segment

The Tracy to Lathrop segment travels from the western edge of the Altamont Hills; passes through or skirts Tracy; crosses agricultural lands, Paradise Cut, and the San Joaquin River; and terminates in Lathrop. Once the proposed alignment (and variants) leave the rolling, grassy terrain of the Altamont Hills, it travels across the flat valley floor. In rural areas, the predominant land use is agriculture; in developed areas, suburban single-family residential and industrial land uses dominate. Views to the Altamont Hills are valued in the region, in addition to background views of the Sierra Nevada when atmospheric conditions permit.

Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track

Existing Visual Resources

The most important visual resources in the viewshed of the Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track, based on analysis of aerial and satellite mapping, site surveys, and policy documents, include the following.

- **Altamont Hills, Diablo Range, and Sierra Nevada:** The grassy hillsides of the Altamont Hills, oak woodlands of the Diablo Range, and the snow-capped mountains of the Sierra Nevada are visible from the proposed rail corridor where elevation, weather conditions, and breaks in development and vegetation allow for views.
- **I-580:** I-580 is an eligible and officially designated State Scenic Highway and San Joaquin County–designated scenic route (Appendix J).
- **Tom Paine Slough, Paradise Cut, and San Joaquin River:** Natural waterways with riparian areas.
- **Joan Sparks Park, Tracy Downtown Plaza, and Mossdale County Park:** Parks and recreational areas in sight of both the existing and proposed rail line.

Viewer Groups and Existing Viewer Sensitivity

Viewer groups for the Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track include rail users traveling through the area (on ACE trains) near the western end of the alignment, west of Corral Hollow Road; recreationists who use local roadways and recreational areas adjacent to the tracks; travelers on I-580, Interstate-205 (I-205 [Business I-205])/West 11th Street, Interstate-5 (I-5), State Route 120 (SR-120), and local roadways; and residential, commercial, industrial, and institutional (e.g., school) viewers (Appendix J, Table J-1.7).

Existing Visual Character and Quality

The Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track would share the same general alignment. Therefore, these variants share the same setting.

The natural environment is dominated by flat, vegetated open space areas with orchards, row crops, and vineyards as well as vacant parcels, which are common to rural areas in the San Joaquin Valley.

In developed areas, the natural environment is dominated by residential, industrial, and institutional landscaping.

Vacant parcels that have been disturbed by past and present mining or industrial storage operations are common in developed areas of the valley, as are undisturbed vacant parcels with grasses. Middleground views of the Altamont Hills and Diablo Range, as well as distant background views to the Sierra Nevada, are valued locally and regionally. Permanent water bodies include the California Aqueduct, Delta-Mendota Canal, Upper Main Canal, Tom Paine Slough, Paradise Cut, and San Joaquin River. Atmospheric visibility can range from *moderately high* to *moderate* because of natural weather patterns, which can include seasonal haze, rain, and overcast conditions. The existing natural setting can range from harmonious in rural areas to less harmonious in areas with industrial development, contributing to a natural setting that ranges from *moderately low* to *moderately high* with respect to natural harmony.

The cultural environment consists of residential, industrial, and institutional uses along the tracks on the southern outskirts of Tracy; low-density rural development; and industrial development between Tracy and Lathrop. In addition, wind turbines line the western ridgelines and can be seen in foreground and middleground views of the Altamont Hills. Although the wind turbines are prominent and detract slightly from views, they create visual interest and do not overwhelm the cultural landscape. I-580, I-205, I-5, and SR-120 are prominent transportation corridors that run near, cross, or parallel the existing tracks. The local roadways, aboveground utility infrastructure (e.g., utility poles with lines), fencing, and sound barriers that separate residences from tracks and transportation corridors also contribute to the cultural environment. Residential, commercial, and rural development along the rail corridor are common to the valley cultural landscape. The industrial areas tend to be disjointed, detracting from the nearby suburban setting and contributing to a cultural setting that ranges from *moderately low* to *moderately high* in cultural order.

The project site environment consists of existing single- and double-track segments that blend well with the landscape in both the rural and developed settings. However, the existing railroad acts as a defining separator between north and south Tracy and a confining edge for eastern Lathrop. The existing project site environment is mostly compatible with the natural and cultural environments, resulting in *moderately high* to *moderate* site coherence.

The overall visual quality of the Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track is *moderately low* to *moderately high*.

Light and Glare

Daytime light and glare levels associated with the Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track range from *moderately low* to *moderately high* because of the rural, suburban, and industrial settings. Nighttime light and glare levels also range from *moderately low* to *moderately high* because of the low lighting levels in rural areas and higher lighting levels in suburban and industrial areas. Lighting along the rail corridor comes primarily from street lighting associated with I-580, I-205, Business I-205/West 11th Street, I-5, SR-120, and local roadways; vehicle headlights; and developed areas.

Downtown Tracy Station, Downtown Tracy Station Parking Alternative 1, and Downtown Tracy Station Parking Alternative 2

Existing Visual Resources

The most important visual resources within the viewshed of the Downtown Tracy Station, Downtown Tracy Station Parking Alternative 1, and Downtown Tracy Station Parking Alternative 2, based on analysis of aerial and satellite mapping, site surveys, and policy documents, include the following.

- **Altamont Hills and Diablo Range:** Background views of the grassy hillsides of the Altamont Hills and Diablo Range are visible down the existing rail corridor and above suburban development on the horizon line.
- **Tracy Downtown Plaza:** Public plaza with views of the existing bus station.

Viewer Groups and Existing Viewer Sensitivity

Viewer groups for the Downtown Tracy Station, Downtown Tracy Station Parking Alternative 1, and Downtown Tracy Station Parking Alternative 2 include rail users, recreationists who use local roadways and the plaza adjacent to the station, travelers on local roadways, and residential and commercial viewers who border the station (Appendix J, Table J-1.7).

Existing Visual Character and Quality

The Downtown Tracy Station (and its two alternatives, Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternative 2), which is proposed for an area adjacent to the existing Tracy Transit Center (bus depot), would use the Tracy Transit Center's parking area and other vacant parcels adjacent to the existing railroad tracks. Vacant land is also located east of the existing station as well as west of the site. Commercial and residential land uses associated with downtown Tracy are located north of the site, and suburban development is located to the south. The natural environment comprises flat terrain and the vacant parcels with ruderal grasses growing on them. The commercial and residential areas north of the site, along Sixth Street, have mature to semi-mature landscaping, including trees, shrubs, and lawn areas that are associated with businesses, streetscaping, parking areas, the plaza, and residential landscaping. Suburban land uses south of Fourth Street also have mature landscaping, such as trees, shrubs, and lawn areas that are associated with suburban streetscaping and residential landscaping. Background views of the grassy hillsides of the Altamont Hills and Diablo Range are visible down the rail corridors as well as on the horizon, above the suburban development, because the vacant parcels in the area lack buildings that would obstruct the views. Atmospheric visibility can range from *moderately high* to *moderate* because of natural weather patterns, which can include seasonal haze, rain, and overcast conditions. The existing natural setting is somewhat disjointed because of the vacant land uses and abrupt transition from commercial to suburban environments, which is slightly disharmonious, contributing to a natural setting that is *moderate* in natural harmony.

The cultural environment consists primarily of suburban residential and commercial land uses. The area is directly adjacent to Central Avenue, across from the existing station. The vacant land uses surrounding the site lack buildings, but some concrete rubble and remnant concrete pads are located on the vacant parcels east of the existing station. The commercial land along Sixth Street and Central Avenue (between B and D Streets) has well-maintained single-story and two-story buildings, with attractive streetscaping and parking areas. South of Sixth Street, between West Street and

B Street, is a small area with light industrial land uses and an associated storage yard that is surrounded by fencing. Suburban residential areas north and south of the site consist of older homes that are mostly well-maintained single-story structures. Most of these homes have fencing to delineate their properties and provide screening from adjacent roadway and rail traffic. Commercial and residential properties bordering the site are likely to have views of the station. The Tracy Downtown Plaza and Central Avenue/Sixth Street roundabout provide a smooth transition between the station and commercial land uses. Local roadways, aboveground utility infrastructure (e.g., utility poles with lines), and adjacent local roadways also contribute to the cultural environment. Commercial and suburban development around the site is orderly. However, the vacant parcels tend to segment the land uses and detract from the adjacent setting, contributing to a cultural setting that is *moderate* in cultural order.

The project site environment for the Downtown Tracy Station (and the two parking alternatives) consists of the station building, existing single-track segments that converge at the station, the station platform, bus depot, and two parking lots that blend fairly well with the suburban landscape. The existing parking lots are east of the station, south of Sixth Street, and south of the station, across the tracks and north of Fourth Street. Both station parking lots feature landscaping that improves the visual quality of the parking areas. Consistent with the natural and cultural environments, the project site environment has *moderate* site coherence.

The overall visual quality of the Downtown Tracy Station, Downtown Tracy Station Parking Alternative 1, and Downtown Tracy Station Parking Alternative 2 is *moderate*.

Light and Glare

Daytime light and glare levels associated with the Downtown Tracy Station (and the two alternatives) are *moderately high* because of the commercial and suburban setting. Trees and shrubs associated with suburban development, the plaza, streetscapes, and parking areas help to reduce glare. Nighttime light and glare levels are also *moderately high* because the existing station is well lit. In addition, the area receives lighting from nearby suburban residential and commercial land developments. Lighting also comes from vehicle headlights on local roadways and street lighting.

River Islands Station

Existing Visual Resources

The most important visual resources within the viewshed of River Islands Station, based on analysis of aerial and satellite mapping, site surveys, and policy documents, include the following.

- **Diablo Range:** The grassy hillsides and oak woodlands of the Diablo Range, which are visible from the rail corridor where elevation and breaks in development and vegetation allow for views.
- **Paradise Cut and San Joaquin River:** Natural waterways with riparian areas under the tracks.

Viewer Groups and Existing Viewer Sensitivity

Viewer groups for the River Islands Station include rail users; recreationists who use local roadways and Dell'Osso Family Farm; travelers on I-5, SR-120, and local roadways; and residential, commercial, industrial, and institutional (e.g., school) viewers who border the tracks (Appendix J, Table J-1.7).

Existing Visual Character and Quality

River Islands Station would be located on agricultural fields in a rural area and in proximity to suburban development. The natural environment comprises flat terrain with a patchwork of agricultural lands. The Dell’Osso Family Farm is east of the proposed station and the proposed station access; the farm has only a few mature trees and seasonal row crops. The River Islands development is just northeast of the site; the portions of the development that would be adjacent to the station have yet to be constructed. However, the site is slightly disturbed from grading and construction staging in the area, which is mostly vegetated with ruderal grasses. Suburban land uses also exist within 0.5 mile of the proposed station site. Prominent background views of the Altamont Hills and Diablo Range are present and valued both locally and regionally. There are no permanent natural water bodies adjacent to the site; however, Paradise Cut and the San Joaquin River are approximately 0.4 and 1.2 miles away, respectively. In addition, built ponds are associated with the River Islands development to the north and the Brown Sand company south of I-5, both of which are more than 0.5 mile away. Atmospheric visibility can range from *moderately high to moderate* because of natural weather patterns, which can include seasonal haze, rain, and overcast conditions. The existing natural setting is somewhat harmonious, with quality views to the Altamont Hills and Diablo Range. However, the transition from rural to suburban environments is slightly abrupt, contributing to a natural setting that is *moderate* in natural harmony.

The cultural environment consists of rural, suburban residential, and light industrial land uses. The I-580 corridor can be seen skirting the base of the Altamont Hills in the middleground; the Delta-Mendota Canal is not readily visible because of distance. The station would be accessed from Manthey Road. The Dell’Osso Family Farm, which would be adjacent to the station, has a main farm building, several open-sided structures, fencing and other site features, large paved areas, and ancillary buildings and structures. In addition, the farm includes recreational features and attractions such as slides, a corn maze, zip lines, a haunted castle, miniature train, and pedal car track. The River Islands development to the north has single-family suburban residences. The development does not have visual barriers such as sound barriers or vegetative buffers (e.g., trees and shrubs); therefore, the development has views of the site beyond the adjacent vacant lot. However, the area between River Islands Station and the existing River Islands development would be infilled with additional development. The River Islands at Lathrop Master Plan indicates that a business park is planned for the area adjacent to the proposed station, between the residential areas and the proposed rail line. The business park would block views of River Islands Station site from residences within the River Islands development (River Islands 2015). Industrial land uses associated with the Brown Sand company are south of I-5. This facility has small and large storage areas, small office buildings, and aggregate transport structures. The site is characteristic of nearby areas where islands of remnant agriculture are juxtaposed with current residential development and construction on large areas of land.

Local roadways, aboveground utility infrastructure (e.g., utility poles with lines), fencing, sound barriers that separate residences from the tracks, middleground views of industrial areas, and transportation corridors also contribute to the cultural environment. The cultural landscape tends to be slightly disjointed because of the abrupt transition from rural to suburban development, contributing to a cultural setting that is *moderate* in cultural order.

The project site environment for the River Islands Station consists of a single-track segment on a berm that blends well with the rural landscape. River levees and freeway berms are also common features in the landscape. Because the station does not currently exist at this location, the

environment comprises natural and cultural environments. Consistent with the natural and cultural environments, the project site environment has *moderate* site coherence.

The overall visual quality of the River Islands Station is *moderate*.

Light and Glare

Daytime light and glare levels associated with River Islands Station are *moderate* because of the rural setting, which is in proximity to suburban development with higher traffic volumes and few trees or shrubs to help reduce glare. Nighttime light and glare levels are also *moderate* because, although the tracks are not lit, the area receives some lighting from nearby suburban residential land uses. Lighting also comes from vehicle headlights on I-5, SR-120, and local roadways and street lighting.

North Lathrop Station

Existing Visual Resources

The most important visual resources within the viewshed of North Lathrop Station, based on analysis of aerial and satellite mapping, site surveys, and policy documents, are as follows.

- **Altamont Hills, Black Hills, and Diablo Range:** Background views of the grassy hillsides of the Altamont Hills, Black Hills, and Diablo Range are visible down rail corridors and local roadways and seen rising above suburban development on the horizon.

Viewer Groups and Existing Viewer Sensitivity

Viewer groups for this station include rail users, recreationists who use local roadways adjacent to the tracks, travelers on local roadways, and rural residential and industrial viewers who border the tracks. A summary of affected viewers groups and associated sensitivities is provided in Appendix J.

Existing Visual Character and Quality

North Lathrop Station would be located east of I-5, in proximity to West Lathrop Road, on industrial lands. The AVE comprises flat terrain with a patchwork of industrial areas, residential areas, and agricultural lands. The industrial area where North Lathrop Station would be located has low-growing vegetation and sparse trees but no formal landscaping. Residences would be located west of the proposed station. The homes have dense, mature landscaping north of West Lathrop Road and sparse landscaping south of West Lathrop Road. Both sides of the corridor are vegetated with low-growing grasses, except where bare ground exists. Background views of the grassy hillsides of the Altamont Hills, Black Hills, and Diablo Range are visible down the rail corridors and from the east side of the AVE and local roadways. These features can also be seen on the horizon, above the suburban development, because vacant parcels and roadway corridors in the area lack buildings that would obstruct the views. Existing views from the residential area are partially impeded because the railroad berm is elevated, thereby impeding ground-level long-range views to the east. Atmospheric visibility can range from moderately high to moderate because of weather patterns, which can include seasonal haze, rain, and overcast conditions. The existing setting is characteristic of a suburban area but slightly disharmonious because of neighboring industrial land uses, contributing to a natural setting that is *moderate* in natural harmony.

The cultural environment consists of suburban residential and industrial land uses. Sharpe Army Depot is the dominant cultural feature in the area surrounding the proposed station site. Land uses

in the area include paved roads, parking areas, unpaved areas, and medium-sized and larger-scale buildings. Suburban residences are either one-story or two-story homes and often surrounded by fencing. The backyards of homes north of West Lathrop Road face the site and have views of the existing railroad from the second floor. First-floor views are blocked by concrete sound barriers that separate the residences from the rail right-of-way. Partial views of the site are available from Seventh Street and the front yards of homes south of West Lathrop Road. However, the rail overpass at West Lathrop Road and the banks along the road prevent open, unobscured views of the site. Local roadways, aboveground utility infrastructure (e.g., utility poles with lines), and elevated tracks on a berm also contribute to the cultural environment. The cultural landscape tends to be somewhat disjointed because of the abrupt transition from residential to industrial development, contributing to a cultural setting that is *moderate* in cultural order.

The proposed station site includes a double-track alignment, which blends well with the flatter rural and industrial landscape. The site is not currently developed with station facilities; therefore, the AVE comprises natural and cultural environments. Consistent with the natural and cultural environments, the project site environment has *moderate* site coherence.

The overall visual quality of the North Lathrop Station is *moderate*.

Light and Glare

Daytime light and glare levels associated with the North Lathrop Station site are *moderate* because of the rural setting, which is in proximity to residential and industrial development, with sparse vegetative cover to help reduce glare. Nighttime light and glare levels associated with the North Lathrop Station site are also *moderate* because, although the tracks are not lit, the area receives moderate levels of lighting from the suburban and industrial development. Lighting also comes from street lighting and vehicle headlights on local roadways.

3.1.4 Impact Analysis

3.1.4.1 Methods for Analysis

Aesthetic resources are all objects (artificial and natural, moving, and stationary) and features (e.g., landforms and water bodies) visible on a landscape. These resources add to or detract from the scenic quality of the landscape (i.e., the visual appeal of the landscape). A visual impact is the creation of an intrusion or perceptible contrast that affects the scenic quality of a viewscape. A visual impact can be perceived by an individual or group as either positive or negative, depending on a variety of factors or conditions (e.g., personal experience, time of day, weather, seasonal conditions).

Identifying a study area's aesthetic resources and conditions involves understanding the visual character of the area's visual features and the regulatory context. Once those parameters are understood, a study area's aesthetic resources are further defined by establishing the AVE and documenting the *visual character of the environmental setting*, including the natural and cultural environments. For the purposes of this section's analysis, the "study area" and AVE are synonymous. The *affected population*, or viewers, are defined by their relationship to the study area, their visual preferences, and their sensitivity to changes associated with the improvements. Visual preferences, or what viewers like and dislike about the AVE's visual character, define the AVE's *visual quality*. Visual quality serves as the baseline for determining the degree of visual impacts and whether a Project's visual impacts would be adverse, beneficial, or neutral.

The impact assessment methodology for aesthetic resources includes the following components.

- Establish the AVE for aesthetics resources and determine landscape units.
- Inventory and describe the affected environment, affected viewers, and existing visual quality and identify key observation points (KOPs) and views for visual assessment.
- Assess visual compatibility and viewer sensitivity and analyze visual impacts.
- Propose methods to mitigate significant visual impacts.

The research and analysis methods used to determine the effects discussed in Section 3.1.4, *Impact Analysis*, are described in detail in Appendix J, and are based on the Federal Highway Administration’s *Guidelines for the Visual Impact Assessment of Highway Projects* (Federal Highway Administration 2015). The methods for evaluating impacts may include data collection methods and sources, an inventory of regional and local conditions, evaluation of analytical context, and qualitative or quantitative data analysis techniques to determine how activities and physical changes associated with the Proposed Project and the alternatives analyzed at an equal level of detail could cause impacts. The context and intensity of the impacts are also considered.

The methods for evaluating impacts are intended to satisfy the state requirements for CEQA and general conformity. In accordance with CEQA requirements, an EIR must include a description of the existing physical environmental conditions in the vicinity of the Proposed and the alternatives analyzed at an equal level of detail. Those conditions, in turn, “will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant” (CEQA Guidelines Section 15125[a]).

3.1.4.2 Thresholds of Significance

CEQA Guidelines Appendix G (Cal. Code Regs. Title 14, Section 15000 et seq.) has identified the significance criteria to be considered for determining whether a project could have significant impacts on aesthetic resources and visual quality.

An impact would be considered significant if construction or operation of the Proposed Project and the alternatives analyzed at an equal level of detail would have any of the following consequences:

- Substantially degrade the existing visual character or quality of public views of the site and its surroundings in a non-urbanized area, including scenic vistas.
- Conflict with applicable zoning and other regulations governing scenic quality in an urbanized area, including scenic vistas.
- Substantially damage scenic resources within a State Scenic Highway.
- Create a new source of substantial light or glare that would adversely affect daytime or nighttime views near the Project improvements.

3.1.4.3 Impacts and Mitigation Measures

Environmental Footprint Assumptions

Potential impacts associated with implementation of the Proposed Project and the alternatives analyzed at an equal level of detail assume the larger environmental footprint at proposed and alternative stations associated with a potential IOS (i.e., Greenville IOS, Mountain House IOS, Southfront Road Station Alternative IOS, and Mountain House Station Alternative IOS) and/or the

expanded parking in 2040. As such, the analysis of the Proposed Project and the alternatives analyzed at an equal level of detail below considers the potential impacts associated with a potential IOS and/or the expanded parking in 2040.

DMU, HBMU, BEMU, and DLH Technology Variants

In addition, there would be some different impacts on aesthetics depending on the technology variant implemented (i.e., the diesel multiple unit [DMU], hybrid battery multiple unit [HBMU], battery-electric multiple unit [BEMU], or diesel locomotive haul [DLH] technology variants).

Construction of the DMU, HBMU, or DLH technology variants would have the same overall impact. Construction of the BEMU technology variant would require construction of an overhead catenary system (OCS) through the Altamont Pass and would, therefore, require more construction activity than the DMU, HBMU, and DLH technology variants.² To identify the worst-case scenario, this analysis considers the larger footprint required to construct the OCS associated with the BEMU technology variant. As such, the analysis of the Proposed Project below considers the potential impacts associated with the BEMU technology variant. Although the degree of impact during construction would be greater for the BEMU technology variant than the DMU, HBMU, and DLH technology variants, the overall impact conclusions for construction identified below would be the same for the four technology variants (DMU, HBMU, BEMU, and DLH). As such, the impacts associated with construction of the DMU, HBMU, BEMU, and DLH technology variants are not discussed any further.

Operation of the DMU, HBMU, and DLH technology variants would be the same. Operation of the BEMU technology variant would be different than the DMU, HBMU, and DLH technology variants because the BEMU technology variant would include OCS. The OCS infrastructure would not be implemented as a part of the DMU, HBMU, and DLH technology variants. The differences in operational impacts between the DMU, HBMU, and DLH technology variants, and the BEMU technology variant are discussed in Impacts AES-2, AES-4, and AES-5. There are no other differences in the impacts between the DMU, HBMU, BEMU, and DLH technology variants, other than what is described in Impacts AES-2, AES-4, and AES-5.

Impact AES-1: Construction of the Proposed Project could substantially degrade the existing visual character or quality of public views of the site and its surroundings, including scenic vistas and scenic highways, and create a new source of substantial light or glare that would adversely affect daytime or nighttime views.

Level of Impact Prior to Mitigation	Potentially significant (mitigation required)
	<u>Proposed Project</u>
	Tri-Valley Alignment
	Dublin/Pleasanton Station
	Isabel Station
	Greenville Station
	Altamont Alignment
	Owens-Illinois Industrial Lead Variant 1, Single Track

² The BEMU technology variant would also include short sections of OCS at the North Lathrop Station and the Dublin/Pleasanton Station as part of the station improvements. Given the setting of these two stations and the other infrastructure being installed, the OCS at these two other locations is not considered to result in substantial aesthetic impacts.

	Owens-Illinois Industrial Lead Variant 2, Double Track Interim OMF Mountain House Station Tracy OMF Tracy to Lathrop Alignment Variant 1, Single Track Tracy to Lathrop Alignment Variant 2, Double Track Downtown Tracy Station River Islands Station North Lathrop Station
	<u>Alternatives Analyzed at an Equal Level of Detail</u> Southfront Road Station Alternative Stone Cut Alignment Alternative West Tracy OMF Alternative Mountain House Station Alternative Downtown Tracy Station Parking Alternative 1 Downtown Tracy Station Parking Alternative 2
Mitigation Measures	AES-1.1: Install visual barriers between construction work areas and sensitive residential and recreational receptors AES-1.2: Limit construction near residences to daylight hours AES-1.3: Minimize fugitive light from portable sources used for construction AQ-2.5: Implement fugitive dust controls during construction
Level of Impact after Mitigation	Less than Significant

Impact Characterization

Visual changes resulting from introducing construction activities and equipment into the viewsheds of all user groups would be temporary for the Proposed Project and the alternatives analyzed at an equal level of detail. Construction of the proposed alignments would generally occur in a linear fashion and migrate along the corridor. Construction would affect all viewers adjacent to or in the construction corridor. Impacts would be greater where there are more viewers and where larger portions of the Proposed Project and the alternatives analyzed at an equal level of detail would be visible. Construction may be visible from some locations with scenic vista views, such as elevated roadways and bridges that cross or parallel the existing rail corridor or adjacent multilevel buildings. The view from elevated roadways and bridges would be fleeting for passing motorists, bicyclists, and pedestrians, and construction would not affect scenic vistas because viewers would be elevated above the rail corridor and construction activities. The view of the surrounding hillsides from adjacent multilevel buildings would not be blocked by construction activities.

Impact Details and Conclusions

The construction impacts below would be common to all Proposed Project alignments, stations, and OMFs (including all track and technology variants); and the alternatives analyzed at an equal level of detail. The impact conclusions below apply to the Proposed Project and the alternatives analyzed at an equal level of detail.

Introduce Industrial-Looking Elements into the Viewshed

All viewer groups are likely to be accustomed to seeing machinery, trucks, and vehicles within the construction area because other roadway improvement projects, development projects, agriculture

and ranching, and rail maintenance activities require the use of such equipment. However, construction would involve, in certain limited cases, construction of a major transportation facilities where none presently exist (such as the rail viaducts at Greenville Road) or where construction is not a common activity (such as within the Altamont Hills). Construction activities would introduce heavy equipment and associated vehicles, such as dozers, graders, scrapers, and trucks, into the viewshed. Depending on location, viewers could see staging areas, worker parking, and equipment and materials storage areas, which would add industrial-looking elements into viewsheds. Such features would be less pronounced in urban and suburban areas but more pronounced in rural areas. However, these features would only be visible in the landscape for a relatively short period of time, during the construction process, and would no longer be visible once construction is complete. Therefore, impacts would be less than significant.

Increase Fugitive Dust and Noise in the Viewshed

Construction activities involving heavy equipment use, soil and material transport, and land clearing in the right-of-way, along public roadways, and at construction staging areas would create fugitive dust and introduce noise. The aesthetic disruptions would be less pronounced in urban areas where there would be less soil disruption, such as along the Tri-Valley Alignment, but more pronounced in rural areas where there would be more soil disruption, such as along the Altamont Alignment. Therefore, impacts from construction would result in a potentially significant impact for sensitive receptors (i.e., residential and recreational viewers and viewers along scenic routes).

Invade Privacy of Residential Viewers

Residential viewers could have construction activities occurring adjacent to their homes, or nearby, evoking a sense of invaded privacy. For example, the Tracy to Lathrop segment travels through many residential areas that would be exposed to construction activities. There are no soundwalls that would block the view of construction along East 6th Street in Tracy, the area in Banta adjacent to the Tracy to Lathrop Alignment, or along 7th Street in Lathrop. In addition, there are areas where there are fences/soundwalls, but residences have second stories with direct views to the Tracy to Lathrop Alignment. Therefore, impacts from construction would result in a potentially significant impact.

Remove and Trim Vegetation

Vegetation clearance within the existing rail corridors is a current and ongoing activity, which is conducted for the physical safety of passing trains. Although evidence of construction activity would be noticeable to area residents and others in the vicinity, such visual disruptions would be short term. They are also a common and accepted feature of the urban environment. Several of the proposed stations and station alternatives would require vegetation removal to accommodate construction of station facilities and parking. Therefore, impacts would be less than significant.

Lighting and Glare

Construction activities would temporarily increase daytime glare, resulting from reflections off the windows of construction vehicles. However, such reflections are already common in all segments because of the presence of existing roadway traffic. Construction glare would be nominal compared to existing conditions and would not increase the level of glare. If nighttime construction activities occur, lighting equipment could create light and glare that could affect sensitive viewers adjacent to

the right-of-way. Therefore, light and glare impacts from construction would result in a potentially significant impact.

Temporary Visual Disruption at Staging Areas

Four temporary staging areas would be used during construction of the proposed Tri-Valley segment. The first temporary staging area would be north of I-580, between Campus Drive and Hacienda Drive. This staging area would be on the grassy lots closest to commercial and transit land uses. There are also multi-family residential lands uses 0.10 mile away. The second temporary staging area would be south of I-580, between I-580 and Las Positas Road and east of Las Colinas Road. This staging area is already disturbed. It has compacted earth, as well as dirt and gravel piles, and is next to commercial, transit, and residential land uses. However, the closest residences, which are 0.15 and 0.25 mile away on nearby hills, do not have direct views of the proposed staging area. The last two staging area would be on either side of I-580, west of Vasco Road. These staging areas would be on grassy lots near industrial, warehouse, and transit land uses.

Construction staging is a common visual element in this area because of the level of development present as well as the new development and utility and infrastructure projects that are occurring in the vicinity. Therefore, the visual presence of staging areas would not be uncommon. Staging areas would be in areas that would not be greatly disrupted by their visual presence or where residential land uses would be located directly next to the staging areas.

There are two small trees along the eastern border of the third staging area and one tree at the southern Vasco Road staging area, along the eastern edge of the staging area that borders Vasco Road. These trees can easily be avoided during staging. However, these trees do not contribute to the overall visual character and quality of the area; therefore, their removal, if required, would not degrade the visual character or quality of the staging areas. Once construction is complete, the temporarily disturbed staging areas would be cleaned up, recontoured to the original grade, and revegetated with appropriate native species, as necessary, to restore the sites to their pre-construction conditions. Therefore, impacts would be less than significant.

Mitigation Measures

The following mitigation measures below would be implemented for the Proposed Project (including all track and technology variants) and the alternatives analyzed at an equal level of detail to minimize construction-period aesthetic impacts.

Mitigation Measure AES-1.1: Install visual barriers between construction work areas and sensitive residential and recreational receptors

The Authority will install visual barriers between stationary construction work areas and sensitive residential (e.g. where residences are directly adjacent to construction areas) and recreational receptors (e.g. where parks are directly adjacent to construction areas) to reduce impacts from the invasion of privacy and the change in visual quality.

Barriers will not need to be placed along the Tri-Valley Alignment or in proximity to the Dublin/Pleasanton Station, Isabel Station, Southfront Road Station Alternative, or Greenville Station because construction would be occurring within the median or in close proximity to I-580, where residential and recreational receptors do not come in to direct visual contact with

the construction site, and there are no residences or recreational areas that would be affected by staging areas identified for the Tri-Valley Alignment.

Barriers will be placed to obscure views of stationary work areas (e.g., staging areas or areas of fixed construction) in other locations (not noted above) where construction activity and equipment would be disruptive and likely to lower the existing visual quality and residential or recreational receptors are directly adjacent to the construction areas.

These efforts will include the following actions and performance standards:

- The Authority will install visual barriers to minimize sensitive receptors' (i.e., residents and recreational areas) views of construction work areas.
 - The visual barriers will be placed to protect residents and recreational areas within 0.25 mile of Project element construction sites where residents or recreationalists would have unobstructed views of the construction area. Recreational areas close to the project corridor that may require barriers can be found listed within the *Existing Visual Resources* section for each alignment, station, parking facility, and operations and maintenance facility. The visual barrier may be chain link fencing with privacy slats, fencing with windscreen material, a wood barrier, or other similar barrier.
 - The visual barrier will be a minimum of 6 feet high to help maintain the privacy of residents and block ground-level views toward stationary construction activities.

Although the visual barriers would introduce a visual intrusion, they would greatly reduce the visual effects associated with visible construction activities, and screening construction activities and protecting privacy is deemed desirable. The visual barriers are an effective means for reducing the visibility of active construction work areas, thereby minimizing the impact on existing localized visual quality.

Mitigation Measure AES-1.2: Limit construction near residences to daylight hours

Construction activities scheduled to occur between 7 a.m. and 6 p.m. near residential areas within 0.25 mile of construction sites, other than construction in I-580, will not take place before or past daylight hours, which vary according to season.

This will reduce the amount of construction experienced by viewer groups because most construction activities would occur during business hours when most viewer groups are likely to be at work and eliminate the need to introduce high-wattage lighting sources that would operate near residences.

Construction of the Tri-Valley Alignment along I-580 will be required to control nighttime construction lighting per Mitigation Measure AES-1.3.

Mitigation Measure AES-1.3: Minimize fugitive light from portable sources used for construction

Any nighttime lighting used for nighttime construction will be evaluated for its ability to safely light the construction work area while reducing light spill and glare. At a minimum, the construction contractor will minimize Project-related light and glare to the maximum extent feasible, given safety considerations, for all viewer groups. Color-corrected halide lights or balloon lights, if suitable for construction of the Project, will be used. Portable lights will be

operated at the lowest allowable wattage and height and raised to a height no greater than 20 feet, except for pedestrian bridge and flyover work. All lights will be screened and directed downward toward work activities and away from the night sky and nearby residential areas to the maximum extent possible. The number of nighttime lights used will be minimized to the greatest extent possible. This measure will also help to ensure that glare is minimized for nighttime drivers along I-580.

Mitigation Measure AQ-2.5: Implement fugitive dust controls during construction

Refer to measure description under Impact AQ-2a in Section 3.3, *Air Quality*.

Significance with Application of Mitigation

Residential viewers could have construction activities occurring adjacent to their homes, or nearby, evoking a sense of invaded privacy and resulting in a potentially significant impact. Implementation of Mitigation Measures AES-1.1, AES-1.2, AES-1.3, and AQ-2.5, which call for installing visual barriers between construction and sensitive receptors, limiting work to daylight hours adjacent to sensitive receptors, limiting construction lighting near sensitive receptors, and limiting fugitive dust, would reduce this impact from the Proposed Project to a less-than-significant level.

For the same reasons listed above, implementation of Mitigation Measures AES-1.1, AES-1.2, AES-1.3, and AQ-2.5 would reduce the impact from construction of the Southfront Road Station Alternative, Stone Cut Alignment Alternative, Mountain House Station Alternative, West Tracy OMF Alternative, Downtown Tracy Station Parking Alternative 1, and Downtown Tracy Station Parking Alternative 2 to a less-than-significant level.

Comparison of Alternatives

Construction of both the Greenville Station and the Southfront Road Station Alternative would be visually disruptive during construction because of the amount of construction occurring along a busy interstate. Both would result in a similar degree of visual impact during construction and would both result in the same less than significant impact after mitigation.

Construction of both the Stone Cut Alignment Alternative and the portion of the proposed Altamont Alignment that the Stone Cut Alignment Alternative would replace would be visually disruptive during construction because of the amount of construction occurring near the construction sites. Both would result in a similar degree of visual impact during construction and would both result in the same less than significant impact after mitigation.

Construction of the Tracy OMF would occur in a rural area, on flat terrain, and would require minimal grading in an area where there are very few or no residences. Therefore, construction would most likely not result in a great deal of visual disruption. The West Tracy OMF Alternative would occur in rural areas where there are few residences. However, a higher intensity of construction would be needed because of the grading associated with hilly terrain. Construction associated with the West Tracy OMF Alternative would be more visually disruptive and would result in a greater degree of visual impact compared with the proposed Tracy OMF. Nonetheless, both the West Tracy OMF Alternative and the proposed Tracy OMF would result in a less than significant impact after mitigation.

Construction of both the Mountain House Station and the Mountain House Station Alternative would be visually disruptive during construction because of the amount of construction occurring near the

construction sites. Both would result in a similar degree of visual impact during construction and would both result in the same less than significant impact after mitigation.

Both the alternative stations (Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternative 2) and the proposed Downtown Tracy Station would result in the same less than significant impacts after mitigation because they would result in similar visual disruptions during construction. Therefore, there would be no difference in impacts between the alternative stations (Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternative 2) and the proposed Downtown Tracy Station.

Impact AES-2: Operation of the Proposed Project could substantially degrade the existing visual character or quality of public views of the site and its surroundings in non-urbanized areas, including scenic vistas.

Level of Impact	Potentially significant (mitigation required)
	<p><u>Proposed Project</u> Altamont Alignment Owens-Illinois Industrial Lead Variant 1, Single Track Owens-Illinois Industrial Lead Variant 2, Double Track Interim OMF Mountain House Station Tracy OMF River Islands Station</p> <p><u>Alternatives Analyzed at an Equal Level of Detail</u> Stone Cut Alignment Alternative West Tracy OMF Alternative Mountain House Station Alternative</p> <p>Less than significant</p> <p><u>Proposed Project</u> Tracy to Lathrop Alignment Variant 1, Single Track Tracy to Lathrop Alignment Variant 2, Double Track</p> <p>No Impact</p> <p><u>Proposed Project</u> Tri-Valley Alignment Dublin/Pleasanton Station Isabel Station Greenville Station Downtown Tracy Station North Lathrop Station</p> <p><u>Alternatives Analyzed at an Equal Level of Detail</u> Southfront Road Station Alternative Downtown Tracy Station Parking Alternative 1 Downtown Tracy Station Parking Alternative 2</p>
Mitigation Measures	AES-2.1: Landscape parking facilities at stations

- AES-2.2: Apply aesthetic design treatments to parking structures, pedestrian overcrossings, Interim OMF, viaduct structures, and retaining walls with high visibility along I-580 and from roadways within the Altamont Hills
- AES-2.3: Utilize selective grading and planting techniques in the Altamont Hills
- AES-2.4: Underground new electric transmission lines in visually sensitive areas
- AES-2.5: Apply aesthetic surface treatments to certain structures in visually sensitive areas

Level of Impact after Mitigation **Less than Significant**

Impact Characterization

Visual changes resulting from operation would affect residential viewers, roadway travelers, and recreationists adjacent to the Proposed Project and the alternatives analyzed at an equal level of detail. The intensity of the impact would vary, depending on the number of viewers present; proximity of viewers to the Proposed Project or the alternatives analyzed at an equal level of detail; degree of physical change in the landscape; visibility of the physical change; volume of train traffic; and required maintenance.

New bridges (e.g., over Altamont Pass Road, the California Aqueduct, Delta-Mendota Canal, Paradise Cut, San Joaquin River) would typically be like adjacent and nearby bridges. Bridge surfaces and façades would not be exposed to viewers, in most cases, because access would not be provided below the bridges. Replacing existing bridges (e.g., at First Street and Vasco Road) would not substantially alter visual resources because the structures would be replaced in the same location and in keeping with the existing visual environment. The new bridges would be of similar widths and made of similar materials. Expanding existing features, such as tunnels and culverts (e.g., the railroad tunnel near I-580 and the culvert at Delta-Mendota Canal), would also not substantially alter visual resources because the structures would be made of similar materials and very similar to existing structures. Relocated railroad signals, safety gates, signal houses, and power poles would not affect visual resources or existing visual quality because the visual elements would only be shifted slightly in the landscape. Relocating railroad crossing and stop-bar pavement markings would shift existing pavement markings but would not affect visual resources or visual quality. Installing concrete crossing panels adjacent to existing concrete crossing panels in the roadway surface would be consistent with existing roadway conditions and would not alter visual resources or affect visual quality. New signal houses could stand out and detract from the landscape depending on the color of the materials used to construct the signal houses.

The proposed alignments within non-urbanized areas would require routine vegetation maintenance in the right-of-way along the proposed rail line footprint. Viewers may see vegetation-clearing activities. However, because farm, rail, and road maintenance are common in the study area, related activities and equipment within the right-of-way would most likely not constitute a visual impact.

Many of the new stations would require the installation of utility lines to carry electricity to power the facilities. This would introduce new vertical utility features that would disrupt the visual landscape from sensitive vantages. The stations would also require fence installation as well as other barriers and railings for safety. Chain link fencing, railings, and similar barriers are often light gray, a color that detracts from views.

KOPs that are representative of the visual character of the Proposed Project and the alternatives analyzed at an equal level of detail, within the non-urbanized areas of the Tri-Valley and Tracy to Lathrop segments, are identified in Figure 3.1-1a to Figure 3.1-1c. Figure 3.1-2 through Figure 3.1-12 show the KOPs and their associated simulations.

Impact Detail and Conclusions

Proposed Project

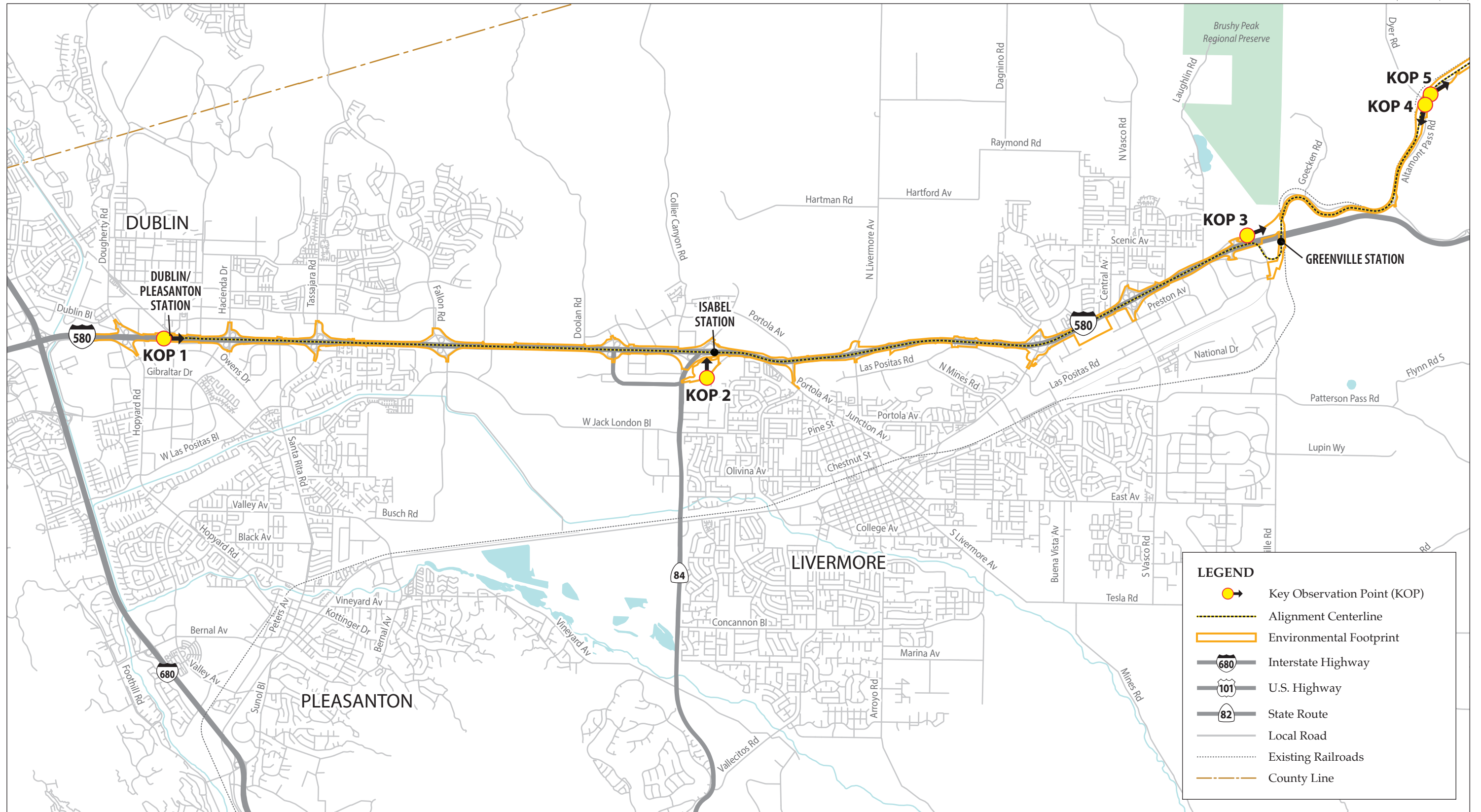
The following proposed alignment and stations would be located within urbanized areas: Tri-Valley Alignment, Dublin/Pleasanton Station, Isabel Station, Greenville Station, Downtown Tracy Station, and North Lathrop Station. Thus, this proposed alignment and these proposed stations would have no visual impact on non-urbanized areas.

Proposed alignments, stations, and OMFs falling within non-urbanized areas include the Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track); Interim OMF; Mountain House Station; Tracy OMF; portions of the Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track outside of Tracy, Banta, and Lathrop city limits; and River Islands Station. The potential impacts from these alignments, stations, and OMFs are analyzed below.

Altamont Alignment

The Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track) would require minor vegetation removal, tree trimming, and landform changes in hilly areas. The Altamont Alignment would be built within an existing dirt road within the Alameda County Transportation Corridor right-of-way until it crosses Jess Ranch Road, just south of I-580. After crossing Jess Ranch Road, it travels away from the existing rail line until it joins the existing rail line spur that terminates near Patterson Pass Road and Midway Road and follows the existing rail line east. The variants diverge just east of the intersection of Patterson Pass Road and Via Nicolo Road. The Owens-Illinois Industrial Lead Variant 1, Single Track follows the existing rail line and has two short sidings just south of the existing rail line, whereas the Owens-Illinois Industrial Lead Variant 2, Double Track follows the existing rail line and has two short sidings just north of the existing rail line. The variants would be so close together that both would result in the same visual effect. The proposed alignment, which would travel through a rural area, would be a minor visual expansion of existing conditions but would generally not alter the existing visual landscape or affect existing visual quality. Therefore, impacts would be less than significant; no mitigation is required.

For the BEMU technology variant, OCS poles and wires would be introduced along the rail corridor through the Altamont Hills. As shown in the “After Project” views for KOPs 4 through 7 in Figure 3.1-5 through Figure 3.1-8, the rail line follows an existing dirt and gravel right-of-way and would not stand out greatly in views. The OCS poles and wires would parallel the tracks, be readily visible, and increase the amount of aboveground utilities seen in views from Altamont Pass Road, I-580, Midway Road and other local roadways that intersect with the alignment. As seen in KOP 4, single- and double-poled transmission lines, a radio tower, and wind turbines are present within the existing viewshed. The proposed OCS poles and wires would increase the amount aboveground infrastructure present and create visual clutter in foreground views from Altamont Pass Road. The visual quality of KOP 4 would be reduced from *high* to *moderately high* (refer to the Simulation Rating Forms in Appendix J). As seen in KOP 5, taller and shorter single- poled transmission lines are



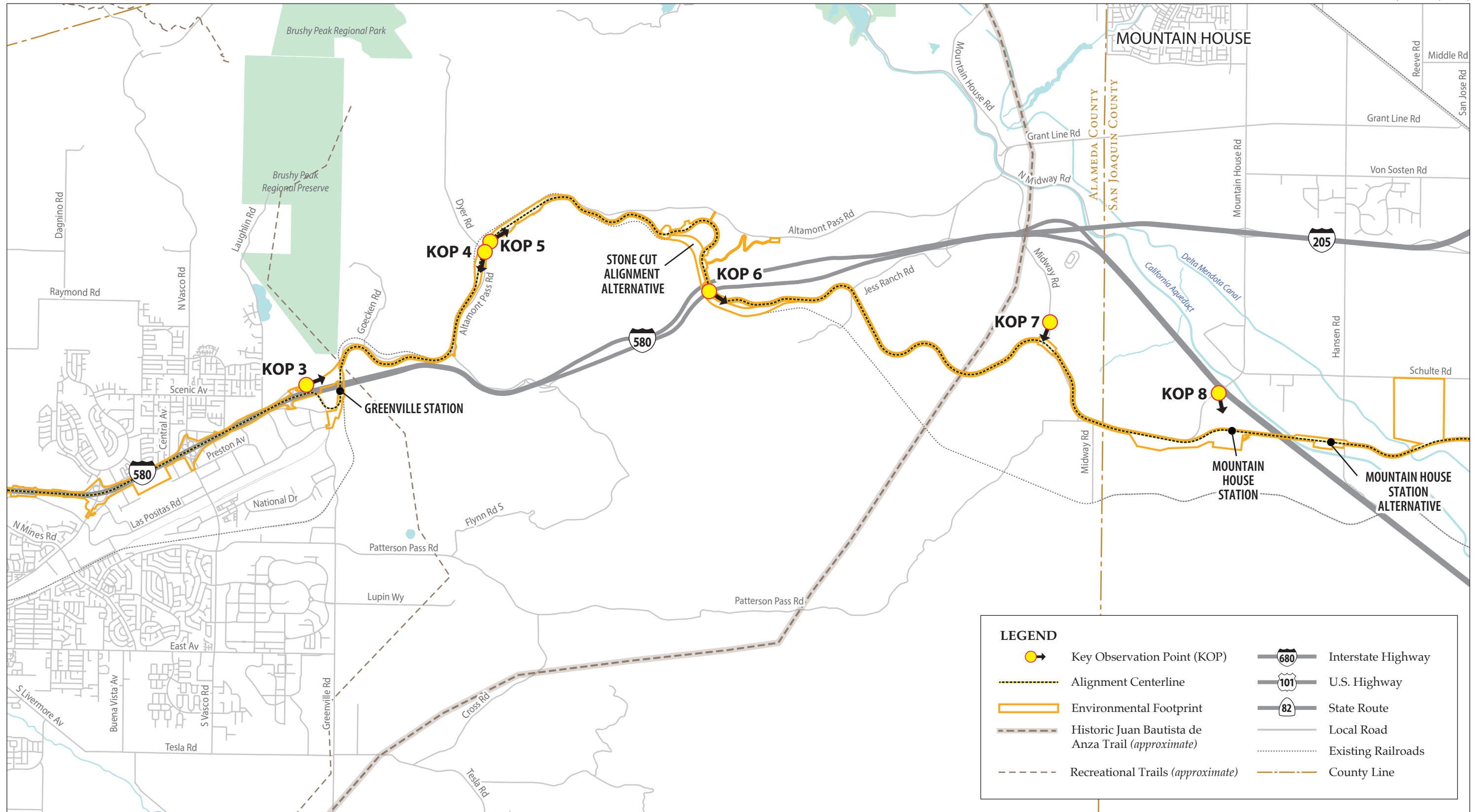
LEGEND

- Key Observation Point (KOP)
- Alignment Centerline
- Environmental Footprint
- Interstate Highway
- U.S. Highway
- State Route
- Local Road
- Existing Railroads
- County Line



Source: ICF 2020.

FIGURE 3.1-1a
Key Observation Points Map for the Tri-Valley Segment



Source: ICF 2020.

FIGURE 3.1-1b

Key Observation Points Map for the Altamont Segment



Source: ICF 2020.

FIGURE 3.1-1c

Key Observation Points Map for the Tracy to Lathrop Segment

KOP 1 – Before Project



Assumptions for Key Observation Point (KOP)

- West Platform view, looking East towards proposed platform



KOP 1 – After Project



Source: AECOM 2020.

FIGURE 3.1-2

KOP 1 – Existing View and Dublin/Pleasanton Station Simulated Conditions

KOP 2 – Before Project



KOP 2 – After Project



Assumptions for Key Observation Point (KOP)

- Intersection between E. Airway Boulevard at Rutan Drive looking North towards proposed parking lot and pedestrian overpass.



Source: AECOM 2020.

FIGURE 3.1-3

KOP 2 – Existing View and Isabel Station Simulated Conditions

KOP 3 – Before Project



Assumptions for Key Observation Point (KOP)

- Intersection of Greenville Rd and Altamont Pass Rd, looking South towards station, multi-level parking lots, and elevated track.



KOP 3 – After Project



Source: AECOM 2020.

FIGURE 3.1-4

KOP 3 – Existing View and Greenville Station Simulated Conditions

KOP 4 – Before Project



Assumptions for Key Observation Point (KOP)

- Intersection of Altamont Pass Rd. and Dyer Rd., looking South towards Valley Link track and OCS system.



KOP 4 – After Project



Source: AECOM 2020.

FIGURE 3.1-5

KOP 4 – Existing View and BEMU Technology Variant (Altamont Pass Road and Dyer Road) Simulated Conditions

KOP 5 – Before Project



Assumptions for Key Observation Point (KOP)

- Altamont Pass Rd, looking North towards OMF Facility



KOP 5 – After Project



Source: AECOM 2020.

FIGURE 3.1-6

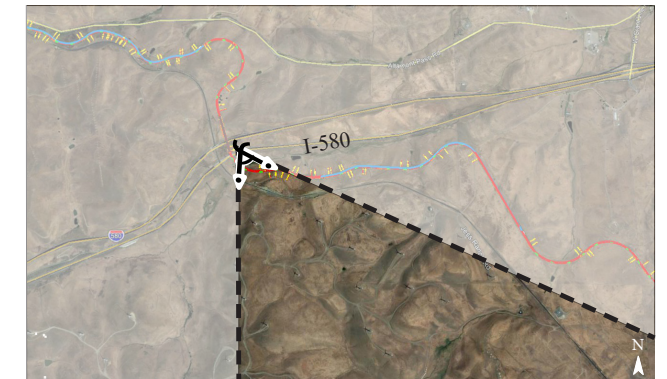
KOP 5 – Existing View and BEMU Technology Variant (Interim OMF) Simulated Conditions

KOP 6 – Before Project



Assumptions for Key Observation Point (KOP)

- I-580 looking South towards the towards Valley Link track and OCS system.



KOP 6 – After Project



Source: AECOM 2020.

FIGURE 3.1-7a

KOP 6 – Existing View and BEMU Technology Variant (I-580) Simulated Conditions

KOP 6 – Before Project

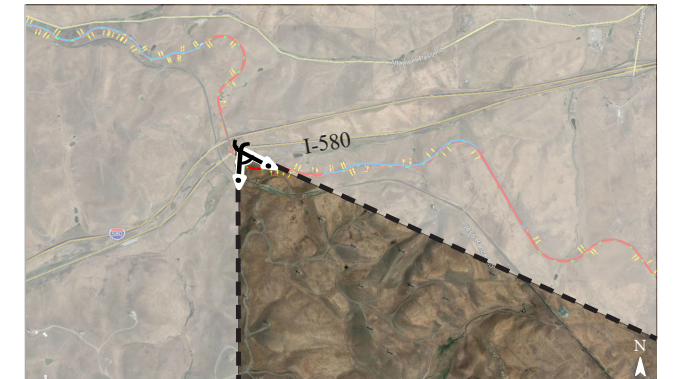


KOP 6 – After Project



Assumptions for Key Observation Point (KOP)

- I-580 looking South towards the towards Valley Link track and OCS system.



Source: AECOM 2020.

FIGURE 3.1-7b

KOP 6 – Existing View and Stone Cut Alignment Alternative Simulated Conditions

KOP 7 – Before Project



Assumptions for Key Observation Point (KOP)

- Midway Rd. looking South towards train and towards Valley Link track and OCS system.



KOP 7 – After Project



Source: AECOM 2020.

FIGURE 3.1-8

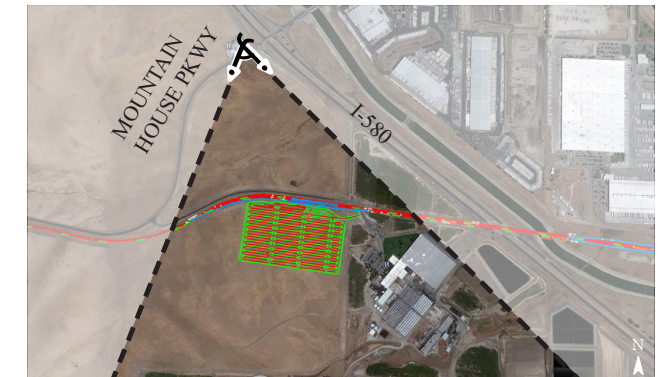
KOP 7 – Existing View and BEMU Technology Variant (Midway Road) Simulated Conditions

KOP 8 – Before Project



Assumptions for Key Observation Point (KOP)

- From southbound I-580 on-ramp looking South towards station and parking lot improvements.



KOP 8 – After Project



Source: AECOM 2020.

FIGURE 3.1-9

KOP 8 – Existing View and Mountain House Station Simulated Conditions

KOP 9 – Before Project



Assumptions for Key Observation Point (KOP)

- 4th St., and North Central Ave., looking North looking towards station and the parking lot structure



KOP 9 – After Project



Source: AECOM 2020.

FIGURE 3.1-10

KOP 9 – Existing View and Downtown Tracy Station Parking Alternative 1 Simulated Conditions

KOP 10 – Before Project



Assumptions for Key Observation Point (KOP)

- Northwest quadrant of North Central Ave. and 6th. St. roundabout Rd, looking South towards multi-level parking structure.



KOP 10 – After Project



Source: AECOM 2020.

FIGURE 3.1-11

KOP 10 – Existing View and Downtown Tracy Station Parking Alternative 2 Simulated Conditions

KOP 11 – Before Project



Assumptions for Key Observation Point (KOP)

- Manthey Road by off ramp to I-5, looking West towards proposed entrance road and Station



KOP 11 – After Project



Source: AECOM 2020.

FIGURE 3.1-12

KOP 11 – Existing View and River Islands Station Simulated Conditions

present within the existing viewshed from Altamont Pass Road. The proposed OCS poles and wires would increase the amount aboveground infrastructure present in this view, but they do not detract from or dominate views due to their apparent height and scale from this vantage from Altamont Pass Road. The visual quality of KOP 5 would be slightly reduced but would remain *moderately high* (refer to the Simulation Rating Forms in Appendix J). As seen in KOP 6, Figure 3.1-7a, large wind turbines are present within the existing viewshed from I-580. The proposed OCS poles and wires would increase the amount aboveground infrastructure present and detract from views from I-580. The visual quality of KOP 6 would be slightly reduced but would remain *moderate* (refer to the Simulation Rating Forms in Appendix J). As seen in KOP 7, single-poled and large lattice steel transmission lines, and wind turbines of various sizes, dominate the middleground of the existing viewshed from Midway Road. The proposed OCS poles and wires, crossing signals, and signage would increase the amount aboveground infrastructure present within the foreground and increase the visual clutter in this view. The visual quality of KOP 7 would be slightly reduced but would remain *moderately high* (refer to the Simulation Rating Forms in Appendix J).

Transmission lines and wind turbines are common visual features within the Altamont Hills. However, due to the scenic nature of views within the Altamont Hills, many viewers (e.g., roadway users and recreational viewers) may consider the increase in aboveground utilities associated with the OCS poles and wires to constitute a new visual intrusion that detracts from the existing visual character of foreground views from local roadways and result in potentially significant impacts. Once the viewer proceeds farther away from the right-of-way, the OCS would be less and less apparent. The poles and structural elements would be the most visually apparent parts of the system. The wires would be of a small diameter and would more readily blend into the background view. The addition of the OCS is considered to have a potentially significant impact from roadways within the Altamont Hills.

In addition, to supply power to Altamont Alignment BEMU technology variant, the traction power substation (TPSS) at the Mountain House Station would be located southeast of the intersection of Midway Road with Patterson Pass Road. Transmission poles and lines would be needed to supply power to the TPSS at the Mountain House Station from the Pacific Gas and Electric Company (PG&E) Midway Station. Due to the dominance of existing substation facilities and transmission lines, the addition of a new TPSS and transmission lines would not be very noticeably in the landscape, unless the TPSS at the Mountain House Station uses bright colors that stand out in the landscape, causing potentially significant impacts.

Interim OMF and Tracy OMF

The Interim OMF would be built on mostly grassy lands but result in a small degree of landform alteration because the site has slightly irregular terrain from past landform manipulation. As shown in the “After Project” view of KOP 5 in Figure 3.1-6, the proposed Interim OMF would remove an existing rural barn structure and broken down cars and introduce fencing, the rail line and spurs, a parking area, and utilitarian-looking structures, including a maintenance shop and equipment building. The Interim OMF would be readily visible from Altamont Pass Road and be noticeable in views. In addition, under the BEMU technology variant, the OCS poles would be readily visible and increase the amount of aboveground utilities seen in views from Altamont Pass Road. As described above, the visual quality of KOP 5 would be slightly reduced but would remain *moderately high* (refer to the Simulation Rating Forms in Appendix J). However, the Interim OMF would appear more prominent on closer approach and when traveling in the opposite direction along Altamont Pass Road. This could result in potentially significant impacts from the conversion of open space

lands because of terrain alterations; the presence of structures, railings, and fencing; surface parking lots; aboveground utilities; and ancillary features such as railroad signals, safety gates, and signal houses. The Tracy OMF would be located on flat parcels of land and require minor earthwork. The maintenance facilities would not be a prominent visual feature in flat areas because industrial or residential land uses dominant views, and existing rail facilities are existing visual elements. The most notable features would be the parking areas associated with the proposed Tracy OMF. The parking areas would be planted with trees to help soften the appearance of the lots. A solar array would be installed along the eastern portion of the site to help supply power to the OMF facility. The solar array is not likely to stand out among other features within the OMF, when seen as a whole. However, it would increase the amount of infrastructure and aboveground utilities associated with the site. Fencing and aboveground utilities would introduce new vertical features that would disrupt the visual landscape and scenic views associated with I-580 and rural residential areas, resulting in potentially significant impacts due to the Interim OMF and Tracy OMF.

In addition, to supply power to the BEMU technology variant, a TPSS would be located within the Tracy OMF site and would not be visually apparent among the OMF facilities. Transmission poles and lines would be needed to supply power to the TPSS at the Tracy OMF from the PG&E Midway Station. Due to the dominance of existing substation facilities and transmission lines, the addition of a new TPSS and transmission lines would not be very noticeably in the landscape, unless the TPSS uses bright colors that stand out in the landscape, causing potentially significant impacts.

Portions of transmission poles and lines would also pass through the rural landscape to connect the TPSS to either the PG&E Midway Station, within the Altamont Hills, or the PG&E Lammers Substation, which is located closer to the TPSS and on flat land. To connect to the PG&E Midway Station, the transmission poles and lines would cross under I-580 and parallel Patterson Pass Road. The transmission poles could increase the amount of utility infrastructure present within this rural area and along Patterson Pass Road, especially if tubular steel poles are required, detract from rural views, and result in potentially significant impacts. Choosing the TPSS to the PG&E Lammers Substation would alleviate this impact, because this alignment would parallel the existing rail line and pass through industrial land uses, resulting in less than significant impacts.

Mountain House Station

The Mountain House Station would be built on grassy agricultural lands but would result in a higher degree of landform alteration because the Mountain House Station would be in a hilly environment. However, as shown in the “After Project” view of key observation point (KOP 8) in Figure 3.1-9, the station would not stand out greatly from a short distance, and the access road to the station would not be noticeable from I-580. The station platform is not readily visible, and the parking lot (including the expanded surface parking in 2040) generally conforms to the terrain. The expansion of surface parking in 2040 would not be very noticeable and would be a visual expansion of visual conditions at the site once it has been implemented. Nonetheless, the fencing and overhead lights associated with the parking lot create lighter colored vertical features that may be noticeable to viewers. Trees planted in the parking lot would also be noticeable but would be similar in appearance to the trees surrounding the Musco Family Olive Company. The Mountain House Station would not disrupt the visual quality of viewsheds because the design would maintain the compositional balance between natural landforms and vegetation. The visual quality of KOP 8 would remain *moderately high* (refer to the Simulation Rating Forms in Appendix J). Views of the Mountain House Station would be more prominent from Patterson Pass Road and could result in potentially significant impacts from the conversion of hilly open space lands due to terrain alterations; the

presence of structures, railings, and fencing; large-scale surface parking lots; aboveground utilities; and ancillary features such as railroad signals, safety gates, and signal houses.

Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track

The Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track would use the existing rail line that travels between Tracy and Lathrop and require minor vegetation removal and tree trimming in flat rural areas. The Tracy to Lathrop Alignment Variant 1, Single Track would be a single-track alignment with several short sidings just south of the existing rail line, whereas the Tracy to Lathrop Alignment, Dell'Osso Family Farm Variant 2, would be a double-track alignment with the same tracks and sidings as the Tracy to Lathrop Alignment, variant 1. The second track for the Tracy to Lathrop Alignment Variant 2, Double Track would run immediately north of and parallel to the existing track. The second track under the Tracy to Lathrop Alignment Variant 2, Double Track would be so close to the existing track that it would result in the same visual effect as the Tracy to Lathrop Alignment Variant 1, Single Track. The proposed alignment would travel through a rural area and be a minor visual expansion of existing conditions. It would generally not alter the existing visual landscape or affect the existing visual quality. Therefore, impacts would be less than significant, and no mitigation is required.

River Islands Station

River Islands Station would require minor vegetation removal along the existing rail line to accommodate construction of station facilities and parking. The remainder of site would be built on grassy agricultural lands with no trees or shrubs. As shown in the "After Project" view of KOP 11 in Figure 3.1-12, the station would not stand out greatly from a short distance, and the access road to the station would not be very noticeable from the I-5/Manthey Road exit. The station platform is not readily visible, the parking lot (including the expanded surface parking in 2040) conforms to the terrain, and trees planted in the parking lot would be noticeable but, rather, similar in appearance to the trees along the existing rail line. The expansion of surface parking in 2040 would not be very noticeable and would be a visual expansion of visual conditions at the site once it has been implemented. However, the fencing and overhead lights associated with the parking lot would create lighter colored vertical features that would be noticeable to viewers. In addition, the pedestrian overpass would introduce a tall light-colored structure that would rise to the top of the adjacent tree line. River Islands Station would maintain the compositional balance between natural landforms and vegetation but disrupt the visual quality of viewsheds because the built features would disrupt views. Therefore, the visual quality of KOP 11 would be reduced from *moderately high* to *moderate* (refer to Simulation Rating Forms in Appendix J), and impacts would be potentially significant.

Alternatives Analyzed at Equal Level of Detail

The Southfront Road Station Alternative, Downtown Tracy Station Parking Alternative 1, and Downtown Tracy Station Parking Alternative 2 would be located within an urbanized area. Thus, the Southfront Road Station Alternative, Downtown Tracy Station Parking Alternative 1, and Downtown Tracy Station Parking Alternative 2 would have no visual impact on non-urbanized areas.

The Stone Cut Alignment Alternative would require landform alterations that would affect the appearance of the hillsides and views from Altamont Pass Road and I-580. The Stone Cut Alignment Alternative tracks would not stand out greatly in views because the rail line would parallel the

existing UPRR right-of-way. However, the OCS poles and wires would parallel the tracks, be readily visible, and increase the amount of aboveground utilities seen in views from Altamont Pass Road and I-580. As seen in KOP 6, Figure 3.1-7b, large wind turbines are present within the existing viewshed from I-580. The proposed OCS poles and wires would increase the amount aboveground infrastructure present and detract from views from I-580. In addition, the Stone Cut Alignment Alternative would result in a large slope cut that would be readily visible from I-580. The visual quality of KOP 6 would be slightly reduced but would remain *moderate* (refer to the Simulation Rating Forms in Appendix J). Retaining wall structures would also be needed to support the slopes in proximity to I-580 underpass. However, the retaining walls would not likely be visible from I-580 because they would be located under the freeway and drivers pass by this location at a high rate of speed. Overall, the increase in aboveground infrastructure and presence of large slope cuts would result in potentially significant impacts.

The Mountain House Station Alternative would be located on flat parcels of land and require minor earthwork. The station platform and the parking lot (including the expanded surface parking in 2040) would not be prominent visual features in flat areas because industrial or residential land uses dominant views, and existing rail facilities are existing visual elements. The most notable features would be the parking lot associated with the Mountain House Station Alternative. The parking lot would be planted with trees to help soften the appearance of the lots. The expansion of surface parking in 2040 would not be very noticeable and would be a visual expansion of visual conditions at the site once it has been implemented. In addition, fencing and aboveground utilities would introduce new vertical features that would disrupt the visual landscape and scenic views associated with I-580 and rural residential areas, resulting in potentially significant impacts.

Like the proposed Mountain House Station, the West Tracy OMF Alternative would be built on grassy agricultural lands in a hilly environment. The West Tracy OMF Alternative would have a similar impact to the Mountain House Station, as described above. The West Tracy OMF Alternative would result in a higher degree of landform alteration because more features would be accommodated in a hilly environment and the West Tracy OMF Alternative would introduce structures, including a maintenance shop and equipment building. The West Tracy OMF Alternative would not be readily visible from I-580 because of intervening terrain. Although portions of the facility may be visible in the distance, they would not stand out in views. However, views of the West Tracy OMF Alternative would be more prominent from Patterson Pass Road and could result in potentially significant impacts from the conversion of hilly open space lands due to terrain alterations; the presence of structures, railings, and fencing; large-scale surface parking lots; aboveground utilities; and ancillary features such as railroad signals, safety gates, and signal houses.

Mitigation Measures

The following mitigation measures would be implemented for specific facilities (e.g., parking, TPSS, etc.) located within the Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track); Interim OMF; Mountain House Station (including the TPSS); Tracy OMF (including the TPSS to the PG&E Midway Station transmission corridor); and River Islands Station. The text of the mitigation measures below identifies which mitigation would apply to which specific facility.

In addition, the following mitigation measures would be implemented for specific facilities located within the Stone Cut Alignment Alternative; West Tracy OMF Alternative; and Mountain House

Station Alternative. The text of the mitigation measures below identifies which mitigation would apply to which specific facility.

Mitigation Measure AES-2.1: Landscape parking facilities at stations

This mitigation measure would apply to parking lots and parking structures at all stations.

Surface parking lots will be planted with trees and groundcover to improve aesthetics and provide shade. Parking structures will also provide landscaping in planter beds, which will be located around the perimeter of the structures. If space allows, street trees will also be planted in association with surface parking lots and parking structures. Shrubs may also be used if space allows. All landscaping will be designed to ensure passenger safety (e.g., so that security cameras and safety lighting are not obscured). No invasive plant species will be used under any circumstances. In addition, plant palettes will use drought-tolerant plant species and have a strong emphasis on California native plant species that are appropriate for a given site. An irrigation and maintenance program will be implemented during the plant establishment period and continued, as needed, to ensure plant survival. The landscaping plan will maximize the use of planting zones that are water efficient. Landscaped areas will be irrigated with a “smart” watering system that evaluates site conditions and plant materials and compares them against weather conditions to avoid overwatering. To avoid undue water flows, the irrigation system will be managed so that any broken spray heads, pipes, or other components are fixed within 1 to 2 days or the zone or system will be shut down until it can be repaired.

Mitigation Measure AES-2.2: Apply aesthetic design treatments to parking structures, pedestrian overcrossings, Interim OMF, viaduct structures, and retaining walls with high visibility along I-580 and from roadways within the Altamont Hills

Designs for all parking structures will consider designs from similar local structures with historic value, or designs from other well-designed structures, and use the features for a design precedent to develop designs for parking structures that complement the cultural and natural landscape, are aesthetically pleasing, and minimize the effects of visual intrusion from facilities on the landscape. Where no local design precedent exists, the designer will research structure designs outside but near the local area. Attention will be paid to design details to ensure that parking structures complement their surroundings and not create additional visual discordance in the landscape. Design of the parking structures will be coordinated with the appropriate planning department within each city and county.

- Tri-Valley Segment: The Proposed Project and alternatives will implement an aesthetic design treatment for all new parking structures, all pedestrian overcrossings over tracks, structures associated with the Interim OMF, and viaduct structures associated with the Tri-Valley Alignment connection to Greenville Station. Modified or relocated retaining walls along the Tri-Valley Alignment will implement an aesthetic treatment that is consistent with the color and texture of the existing retaining walls. New retaining walls along the Tri-Valley Alignment that are located in proximity to existing retaining walls will mimic the designs of nearby retaining walls. For example, the new retaining wall along the north side of I-580 between Isabel Avenue and Livermore Avenue will mimic the retaining wall with vertical striping located south of I-580 between Isabel Avenue and Livermore Avenue.
- Altamont Segment: Aesthetic design treatments will be implemented for retaining walls with high visibility to viewers on roadways within the Altamont Hills. Within the Altamont

Hills, this applies to locations that apply following cross-sections from the *Valley Link Project 15% Preliminary Engineering* plans dated July 02, 2020: D1 and D1-A along Altamont Pass Road, D3-A along I-580, D5-A along Midway Road, and G along Altamont Pass Road and I-580 (Appendix E). Choosing earth-toned colors for the surfaces will 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 as well as surfaces that are textured to appear like natural materials (e.g., rock or cobble). Alternatively, a design theme may be incorporated (e.g., wildlife and plants from local native oak woodlands; traditional architectural elements, such as inset panels; other designs that reflect local heritage or the environment) using form liners. This will 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 viaduct structures, elements that will be visible to traffic or recreational viewers at the overcrossings, abutments, side supports, and columns or on the decking.

- Tracy to Lathrop Segment: This measure does not apply to retaining walls along the Tracy to Lathrop Alignment because they would not be needed or readily visible due to the flat terrain.

The following examples of aesthetics treatments are provided for guidance and do not represent requirements. The Authority, in coordination with the cities and counties, will identify the appropriate aesthetic treatments that will be implemented. Nearby examples of aesthetic treatments include the I-5/French Camp interchange in Stockton and the SR-99/Sheldon Road overcrossing in Elk Grove. Non-local examples include Maryland 216 in Prince Georges County, Maryland; the U.S. 54/East Kellogg Drive and South Oliver Street interchange in Wichita, Kansas; and Roberts Road Bridge in Los Gatos, California. Roughened retaining wall surfaces can soften the verticality of wall faces by providing visual texture and reducing the amount of smooth surface, which can reflect light. A plantable wall surface, such as a retaining wall structure that allows interstices for planting, could be a possible best management practice to help introduce more landscaping. A nearby example would be the slopes east and west of the Rocklin Road/I-80 undercrossing. A plantable wall surface should not be used if it requires more space and creates a greater impact on the adjacent natural landscape. The color of the wall should also be carefully considered. Studies have shown that structures that are 2 to 3 degrees darker than the color of the general surrounding area create less of a visual impact than structures with matching or lighter hues (U.S. Department of the Interior, Bureau of Land Management 2008). In general, light buff/tan, brown, or gray colors stand out more than darker colors, such as deep browns, deep red-brown colors, and deep warm grays that can complement the surrounding vegetation.

Mitigation Measure AES-2.3: Use selective grading and planting techniques in the Altamont Hills

Prior to construction mobilization, the Authority and/or its' contractor will develop a grading and planting plan that identifies site-specific measures to remediate exposed soil and terrain issues, create a smooth transition between disturbed and natural habitats, and mitigate visual effects within the Altamont Hills. The term *construction mobilization* refers to the moment approval is given for materials and supplies, construction equipment, construction facilities and staging, and personnel to be physically on-site and for site modifications to begin. Existing information, such as topographical maps, vegetative surveys or records, and photographs, that

show pre-existing site-specific (or reference-site) conditions prior to construction will be evaluated and used as tools for restoring disturbed sites. In general, however, the majority of sites will be evaluated for restoration to native habitat because of the amount of terrain alteration as well as vegetation and habitat loss that could result from construction of the proposed alignment and proposed stations or alternatives in the Altamont Hills. At a minimum, the grading and revegetation plans will meet the following performance standards.

- Access roads to stations in the Altamont Hills will use the existing terrain as an asset to create curvilinear roadways that locate access roads parallel to slopes. Access roads running perpendicular to slopes will be avoided. This will reduce the visibility of the access road and make it more harmonious with the natural terrain. This technique will not be used where doing so would constitute a negative impact on sensitive habitats or sensitive species that outweighs the reduction of visual effects.
- Surface parking areas will use the natural terrain as well, except where slopes exceed Americans with Disabilities Act access standards. This will create subtle, gently undulating surface parking lots with visual variety.
- All terrain will be designed and graded to be rounded, avoiding sharp angles and steep or abrupt grade breaks or slope cuts. All exposed slopes will be seeded for erosion control and aesthetics. The Authority will require construction contractors to incorporate native grass to standard seed mixes, which may be non-native; however, under no circumstances will any invasive grass plant species be incorporated into the seed mix.
- Special attention will be paid to transitions between undisturbed and disturbed terrain to ensure that the transition appears as natural as possible and blend the lines between the two for a natural, organic appearance.

Mitigation Measure AES-2.4: Underground new electric transmission lines in visually sensitive areas

Where feasible, the Authority will underground new electric transmission line utilities (e.g., connections to TPSS sites, utilities supplying power to traction power stations) in visually sensitive areas to minimize their visual intrusion upon the landscape. This mitigation applies to new electric transmission lines in the Altamont Segment east of Greenville Road that may be associated with the Greenville TPSS connection to PG&E only. This mitigation does not apply to the connection between the proposed new TPSS that is approximately 0.3 mile east of the PG&E Midway substation and the PG&E Midway substation.

OCS lines must be overhead and thus this measure does not apply to the OCS lines along the alignment. Undergrounding will not be required where existing transmission poles are used to carry additional power lines associated with the project or within urban areas where existing transmission corridors are present and the city has provided an exemption to undergrounding new utilities.

Undergrounding will be a priority in the Altamont Hills. However, undergrounding will not be used where implementation constitutes an additional adverse impact on sensitive habitats or sensitive species that outweighs the reduction in visual effects. Therefore, underground electric transmission lines may daylight to avoid such areas. In such cases, the Project engineer will identify site-specific location adjustments to minimize tree removal and strategically locate new

transmission lines along designated scenic routes in a manner that reduces the visual impacts on scenic resources and views along those routes.

Implementation of this measure will minimize the effects on existing visual quality and character that result from new electric transmission lines in visually sensitive locations and due to associated removal and pruning of mature vegetation along proposed new transmission lines.

Mitigation Measure AES-2.5: Apply aesthetic surface treatments to certain structures in visually sensitive areas

This measure applies to new fencing, pedestrian bridge safety barriers, safety railings, TPSS, OCS and steel transmission poles in the Altamont Hills. This measure also applies to the solar array infrastructure at the Tracy OMF. This measure also applies to all signal houses associated with the proposed alignments that would be visible to residents and from recreational areas and local roadways.

These features will be colored or painted a shade that is two to three shades darker than the general surrounding area. Colors will be chosen from U.S. Department of the Interior, Bureau of Land Management, Standard Environmental Colors Chart CC-001, June 2008, which provides suitable colors for a variety of landscape types. Because color selection will vary by location, the facility designer will employ the use of color panels, which will be evaluated from KOPs during common lighting conditions (e.g., front lighting versus backlighting) to aid in the selection of an appropriate color. Color selections will be made from the coloring of the most prevalent season. Panels will be a minimum of 3 by 2 feet and evaluated from various distances, within 1,000 feet, to ensure the best possible color. If the TPSS contains a non-metal structure, then the building exterior will also utilize the color selection techniques described above to improve aesthetics, such as by using integral-colored concrete.

All paints used for the color panels and structures will be color matched directly from the physical color chart rather than digital or color-reproduced versions of the color chart. Paints will be a dull, flat, or satin finish to reduce the potential for glare; the use of glossy paints for surfaces will be avoided. Appropriate paint types will be selected that ensure durability for the finished structures. The appropriate operating agency or organization will maintain the paint color over time.

In addition, OCS and steel transmission poles in the Altamont Hills will be designed in a manner that allows these features to blend with the surrounding built and natural environments so that the new features complement the visual landscape. Aesthetic considerations shall be considered when selecting OCS pole design. Different pole designs, including round poles, square poles, and multi-face poles, have different characteristics. Some individuals find square poles to be aesthetically less desirable due to their angularity. In addition, the Authority shall consider options to reduce pole diameter with increased pole thickness instead of wider poles with lesser thickness. Aesthetic considerations shall be balanced with other considerations including cost, safety, maintenance, and durability. The Authority shall also evaluate the potential to house OCS wire-tensioning weights inside larger diameter poles.

Significance with Application of Mitigation

Implementation of Mitigation Measures AES-2.1, AES-2.2, AES-2.3, AES-2.4, and AES-2.5 would reduce impacts associated with the Proposed Project due to the following proposed stations and

OMFs to a less-than-significant level: the Interim OMF, Mountain House Station (including the TPSS), Tracy OMF (including the TPSS to the PG&E Midway Station transmission corridor), and River Islands Station. This is because selective grading would ensure that new landforms would preserve and blend with hilly terrain and pedestrian overcrossings would blend with and complement the surrounding landscape. In addition, darker fencing would improve visibility through the barrier compared with standard gray metal surfaces, dark-colored overhead light standards would recede into the view, and undergrounding would prevent visual intrusions from new utilities. In addition, ancillary rail features would not stand out in the landscape and detract from views.

Implementation of Mitigation Measures AES-2.5 would reduce impacts associated with the OCS poles associated with the Altamont Alignment BEMU technology variant to a less-than-significant level. This is because dark-colored OCS poles would recede into the view compared to standard gray metal surfaces.

For the same reasons listed above, implementation of Mitigation Measures AES-2.3 and AES-2.5 would reduce the impact from operation of the Stone Cut Alignment Alternative to a less-than-significant level and implementation of Mitigation Measures AES-2.1, AES-2.2, AES-2.3, AES-2.4, and AES-2.5 would reduce the impact from operation of the Mountain House Station Alternative and West Tracy OMF Alternative to a less-than-significant level.

Comparison of Alternatives

The proposed Greenville Station and the Southfront Road Station Alternative would both be in an urbanized area; therefore, both the proposed Greenville Station and the Southfront Road Station Alternative would result in the same no impact on a non-urbanized area.

Similarly, the proposed Downtown Tracy Station and the station alternatives (i.e., Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternative 2) would be located in an urbanized area; therefore, the proposed Downtown Tracy Station and the station alternatives (Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternative 2) would result in the same no impact on a non-urbanized area.

Both the Stone Cut Alignment Alternative and the portion of the proposed Altamont Alignment that the Stone Cut Alignment Alternative would replace would require landform alterations that would affect the appearance of the hillsides and have OCS poles and wires that would parallel the tracks, be readily visible, and increase the amount of aboveground utilities seen in views from Altamont Pass Road and I-580. Like the Altamont Alignment, the Stone Cut Alignment Alternative tracks would not stand out greatly in views because the rail line would parallel the existing UPRR right-of-way. However, compared to the Altamont Alignment, the Stone Cut Alignment Alternative would require a large slope cut that would be more readily visible from I-580. Both the Stone Cut Alignment Alternative and the proposed Altamont Alignment would result in a similar degree of visual impact and would both result in the same less than significant impact after mitigation.

Implementation of the West Tracy OMF Alternative instead of the proposed Tracy OMF, would not change the impact associated with operational visual impacts in non-urbanized areas. The West Tracy OMF Alternative and Tracy OMF would be in rural areas where there are very few or no residences. Furthermore, the Tracy OMF would be located on flat terrain that would require minimal grading. Therefore, they would not be likely to result in a great deal of visual disruption. The West Tracy OMF Alternative would result in a higher degree of change because this facility

would be built in an area with hilly terrain and scenic views. Therefore, changes associated with the West Tracy OMF Alternative would be more visually disruptive and result in a greater degree of visual impact compared with the Tracy OMF, even with mitigation. However, the impact conclusion would be the same for the Tracy OMF and West Tracy OMF Alternative, after the application of mitigation.

Implementation of the Mountain House Station Alternative, instead of the proposed Mountain House Station, would not change the impact associated with operational visual impacts in non-urbanized areas. The Mountain House Station Alternative would be located on flat parcels, while the Mountain House Station would be located on hilly terrain. The Mountain House Station would result in a higher degree of change because this facility would be built in an area with hilly terrain and scenic views. Therefore, changes associated with the Mountain House Station would be more visually disruptive and result in a greater degree of visual impact compared with the Mountain House Station Alternative, even with mitigation. However, the impact conclusion would be the same for the Mountain House Station and Mountain House Station Alternative, after the application of mitigation. Both would result in the presence of structures, railings, and fencing; large-scale surface parking lots; aboveground utilities; and ancillary features such as railroad signals, safety gates, and signal houses. Therefore, there would be no difference in impacts between the Mountain House Station Alternative and the proposed Mountain House Station.

Impact AES-3: Operation of the Proposed Project could conflict with applicable zoning and other regulations governing scenic quality in urbanized areas, including scenic vistas.

Level of Impact	Potentially significant (mitigation required)
	<p><u>Proposed Project</u> Tri-Valley Alignment Dublin/Pleasanton Station Isabel Station Greenville Station Downtown Tracy Station North Lathrop Station</p>
	<p><u>Alternatives Analyzed at an Equal Level of Detail</u> Southfront Road Station Alternative Downtown Tracy Station Parking Alternative 1 Downtown Tracy Station Parking Alternative 2</p>
	<p>Less than significant</p>
	<p><u>Proposed Project</u> Tracy to Lathrop Alignment Variant 1, Single Track Tracy to Lathrop Alignment Variant 2, Double Track</p>
	<p>No Impact</p>
	<p><u>Proposed Project</u> Altamont Alignment Owens-Illinois Industrial Lead Variant 1, Single Track Owens-Illinois Industrial Lead Variant 2, Double Track Interim OMF</p>

	Mountain House Station Tracy OMF River Islands Station
	<u>Alternatives Analyzed at an Equal Level of Detail</u> Stone Cut Alignment Alternative West Tracy OMF Alternative Mountain House Station Alternative
Mitigation Measures	AES-2.1: Landscape parking facilities at stations AES-2.2: Apply aesthetic design treatments to parking structures, pedestrian overcrossings, Interim OMF, viaduct structures, and retaining walls with high visibility along I-580 and from roadways within the Altamont Hills AES-2.3: Utilize selective grading and planting techniques in the Altamont Hills AES-2.4: Underground new electric transmission lines in visually sensitive areas AES-2.5: Apply aesthetic surface treatments to certain structures in visually sensitive areas AES-3.1: Replace disturbed vegetation along landscaped freeways
Level of Impact after Mitigation	Less than Significant

Impact Characterization

Proposed alignments, proposed stations, and alternative stations falling within urbanized areas include the Tri-Valley Alignment; Dublin/Pleasanton Station; Isabel Station; Southfront Road Station Alternative; Greenville Station; portions of the Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track within Tracy, Banta, and Lathrop city limits; Downtown Tracy Station; Downtown Tracy Station Parking Alternative 1; Downtown Tracy Station Parking Alternative 2; and North Lathrop Station. All other proposed and alternative alignments, proposed and alternative stations, and proposed and alternative OMFs (Altamont Alignment, including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track; Stone Cut Alignment Alternative; Interim OMF; Mountain House Station; Tracy OMF; River Islands Station; Mountain House Station Alternative; and West Tracy OMF Alternative) would fall in non-urbanized areas and would not conflict with applicable zoning and other regulations governing scenic quality in urbanized areas, and would thus result in no impact.

The Tri-Valley Alignment, Dublin/Pleasanton Station, Isabel Station, Southfront Road Station Alternative, and Greenville Station would fall within view of scenic corridors that are protected by state and county regulations. Impacts associated with scenic corridors are discussed in detail below (see Impact AES-4).

Visual changes resulting from operation have the potential to conflict with local regulations in urbanized areas if they conflict with the policies identified in local policy documents, such as city general plans. General plans for urbanized areas include those guiding the development of Dublin, Pleasanton, Livermore, Tracy, and Lathrop. In general, these plans include policies to facilitate community character, land use, the protection of hillsides, and lighting. Impacts associated with lighting are discussed in detail under Impact AES-5 and not discussed under this impact.

New (or replacement) bridges or other elevated structures would typically be like adjacent and nearby bridges. Bridge surfaces and façades would not be exposed to viewers, in most cases, because no access would be provided below the bridges. In such cases, replacing existing bridges (e.g., at First Street and Vasco Road) would not substantially alter visual resources because the structures would be replaced in the same location and would be in keeping with the existing visual environment. The new bridges would be of a similar width and made of similar materials. Expanding existing bridges (e.g., at I-580 and Airway Boulevard/Isabel Avenue and Livermore Avenue) would also not substantially alter visual resources because the new bridges would be located directly adjacent to existing bridge structures, a similar width, and made from similar materials.

Relocated railroad signals, safety gates, signal houses, and power poles would not affect visual resources or the existing visual quality because these are existing visual elements that would only be shifted slightly in the landscape. Relocating railroad crossing and stop-bar pavement markings would shift existing pavement markings but would not affect visual resources or visual quality. Installing concrete crossing panels adjacent to existing concrete crossing panels in the roadway surface would be consistent with existing roadway conditions and would not alter visual resources or affect visual quality. New signal houses could stand out and detract from the landscape, depending on the color of material used to construct the signal houses.

All proposed alignments would require routine vegetation maintenance in the right-of-way along the proposed rail line footprint. Viewers may see vegetation-clearing activities. However, because farm, rail, and road maintenance are common in the study area, related activities and equipment within the right-of-way would most likely not constitute a visual impact.

KOPs that are representative of the visual character of the Proposed Project and the alternatives analyzed at an equal level of detail, within the urban areas of the Tri-Valley and Tracy to Lathrop segments, are identified in Figures 3.1-1a to 3.1-1c. Figures 3.1-2 through 3.1-12 show the KOPs and their associated simulations.

Impact Detail and Conclusions

Proposed Project

Landscaped Freeways

As identified in Table 3.1-1, there are several Caltrans-designated landscaped freeways within view of Proposed Project. Table J-3.1 in Appendix J, *Caltrans' Designated Landscaped Freeway Screening*, includes a preliminary screening of proposed alignments, stations, and OMFs within 3 miles of landscaped freeways to determine the proposed alignments, stations, and OMFs requiring further analysis. This screening analysis determined that the Tri-Valley Alignment and Isabel Station would fall within landscaped freeway segments. The Proposed Project would not introduce billboards or signs along segments of landscaped freeways. Therefore, the Proposed Project would need to directly affect vegetation along a landscaped freeway segment to affect its designation.

The Dublin/Pleasanton Station and Tri-Valley Alignment (within post miles 13.17–13.41 and 18.54–19.12) would not affect vegetation because the plantings would be along portions of the freeway that would not be affected by the Proposed Project (e.g., on the opposite side of the freeway). Thus, this impact is considered less than significant.

The Tri-Valley Alignment (within post miles 10.22–10.82, 14.97–15.63, and 17.55–18.31) would directly affect vegetation along landscaped freeway segments. This vegetation would be affected by modifications to the edge of I-580 and result in the removal of a few trees or shrubs as well as groundcover at each location. Because these removals could affect the classification of each segment as a landscaped freeway, the impact from the Tri-Valley Alignment is considered potentially significant.

Dublin General Plan

Portions of the Tri-Valley Alignment and Dublin/Pleasanton Station would fall within the boundaries of the Dublin General Plan, which has policies to protect ridgelines, hilltops, and steep slopes from development; protect views of ridgelines, hilltops, and foothills; prevent over-lighting to protect the darkness of the night sky; protect oak woodlands and native plant communities; require native plant revegetation; incorporate visual screening techniques for visually challenging features; and create a sense of arrival at gateways to the city through attractive design treatments. The Tri-Valley Alignment would be built in the middle of I-580. Although the freeway would need to be widened slightly, widening would not greatly affect vegetation, introduce discordant structures, greatly alter structures, or conflict with local regulations. Therefore, impacts on scenic quality due to conflicts with policies in the Dublin General Plan would be less than significant due to implementation of the Tri-Valley Alignment.

As shown in the “After Project” view of KOP 1 in Figure 3.1-2, the new Valley Link platform would be located adjacent to the existing BART platform at Dublin/Pleasanton Station would not differ greatly from existing conditions. However, the fencing and overhead lights associated with the platform would create vertical features that may be noticeable to viewers; however, they are in keeping with the existing lights and fencing along the existing platform (see Impact AES-5 regarding nighttime lighting effects). No vegetation is present at or near the existing station; therefore, no vegetation would be removed. The proposed elevator for platform access would be like the existing elevator enclosure, and the proposed seating area and overhangs would not detract from views. The Dublin/Pleasanton Station would not greatly disrupt the visual quality of viewsheds because the design would maintain the compositional balance between natural landforms and vegetation. The visual quality of KOP 1 would remain *moderate* (refer to Simulation Rating Forms in Appendix J). The new Valley Link platform that would be located adjacent to the existing BART platform would not affect views of the ridgelines, hilltops, and foothills because the development surrounding the station is dense and limits such views. However, as shown in the simulation, the chain link fencing and the new wall at the base of the chain link fencing would be utilitarian looking and may not meet the City of Dublin’s goals to provide an attractive gateway and sense of arrival into the city. Therefore, impacts on scenic quality due to conflicts with policies in the Dublin General Plan would be potentially significant due to implementation of a portion of the Dublin/Pleasanton Station within the city of Dublin.

Pleasanton General Plan

Portions of the Tri-Valley Alignment and Dublin/Pleasanton Station would fall within the boundaries of the Pleasanton General Plan. The Pleasanton General Plan has policies to protect views of ridgelines, hilltops, and foothills; protect heritage trees and native plant communities; and protect open space. The proposed Tri-Valley Alignment and Dublin/Pleasanton Station would not conflict with local regulations because they would be built in the middle of I-580. Although the freeway would need to be widened slightly, widening would not greatly affect vegetation or

introduce discordant structures that would affect views of the ridgelines, hilltops, and foothills. Development surrounding the station is dense and limits such views. Furthermore, widening would not greatly alter structures or conflict with local regulations. Therefore, impacts on scenic quality due to conflicts with policies in the Pleasanton General Plan would be less than significant for the portions of the proposed Project within the city of Pleasanton.

Livermore General Plan

Portions of the Tri-Valley Alignment and all of the Isabel Station would fall within the boundaries of the *Livermore General Plan*, which has policies to protect hillsides from development, protect scenic views, prevent excessing nighttime lighting to preserve the night sky, and use attractive design treatments for development. Impacts associated with nighttime lighting are discussed under Impact AES-5 (City of Livermore 2004).

Like the Dublin/Pleasanton Station, the Isabel Station would have station platforms that would be seen in the median of I-580 as shown in Figure 2-3A. As shown in the “After Project” view of KOP 2 in Figure 3.1-3, the Isabel Station platform and parking lot would not stand out greatly within the landscape from East Airway Boulevard. The station platform would not be readily visible, and the parking lot to accommodate the parking space needed before 2040 would conform to the terrain. Isabel Station would not greatly disrupt the visual quality of viewsheds because the design would generally maintain the compositional balance between natural landforms and vegetation once landscaping matures. The visual quality of KOP 2 would be improved from *moderate* to *moderate high* once landscaping matures (refer to Simulation Rating Forms in Appendix J). However, until then, light standards and the pedestrian overpasses would create lighter-colored vertical features that would be noticeable to viewers and could detract from scenic views that are protected by the City of Livermore. In addition, the Isabel Station would construct additional surface parking and a two- or three-level parking garage, as shown in Figure 2-3B, to accommodate parking demands after 2040. The expansion of surface parking in 2040 would not be very noticeable and would be a visual expansion of visual conditions at the site once it has been implemented. The multi-level parking garage would be of similar height to the station platforms and would be partially screened by mature trees located along the edges of the proposed garage. However, the parking garage would introduce an additional structure into the landscape and would create a visual intrusion compared with existing conditions and compared with conditions of the Proposed Project prior to 2040, reducing the visual quality. Therefore, this impact on scenic quality due to conflicts with policies in the Livermore General Plan is potentially significant due to implementation of the Isabel Station.

Alameda County General Plan

The Greenville Station, a portion of the Tri-Valley Alignment connection to the station, the TPSS at the Greenville Station, the TPSS transmission connection to the PG&E Las Positas Substation, or the TPSS transmission connection to the PG&E Lawrence Livermore Substation would fall within the boundaries of the Alameda County General Plan, which has policies to protect ridgelines, hilltops, and steep slopes from development; protect views of ridgelines, hilltops, and foothills; underground utility lines; prevent excessing nighttime lighting to preserve the night sky and reduce glare; protect oak woodlands and native plant communities; require native plant revegetation; and incorporate aesthetic design techniques to protect scenic resources. Impacts associated with nighttime lighting are discussed under Impact AES-5.

The Tri-Valley Alignment within Alameda County would build an elevated rail viaduct to connect to Greenville Station, which could detract from views of the hillsides and conflict with local regulations

if not properly designed. The Greenville Station platform would not be readily visible because it would be located under the I-580 overpass for the existing rail line, and the parking lot (including the expanded surface parking in 2040) would conform to the terrain. The expansion of surface parking in 2040 would not be very noticeable and would be a visual expansion of visual conditions at the site once it has been implemented. Nonetheless, the fencing and overhead lights associated with the parking lot would create lighter-colored vertical features that would be noticeable to viewers. The Greenville Station would not greatly disrupt the visual quality of viewsheds because the design would generally maintain the compositional balance between natural landforms and vegetation once landscaping matures. However, until then, light standards, the large surface area at maximum build out of the parking lots, retaining walls, and fencing would create lighter-colored vertical features that would be noticeable to viewers and could detract from scenic views that are protected by Alameda County. To supply power for the BEMU technology variant, transmission poles and lines would be needed to supply power to the TPSS at the Greenville Station via the PG&E Las Positas Substation, along Southfront Road, or the PG&E Lawrence Livermore Substation, along Greenville Road. Due to the dominance of existing development and transmission lines along local roadways, the addition of a new TPSS and transmission lines would not be very noticeably in the landscape, unless the TPSS at the Greenville Station uses bright colors that stand out in the landscape, causing potentially significant impacts. Therefore, impacts on scenic quality due to conflicts with policies in the Alameda County General Plan would be potentially significant for the Tri-Valley Alignment, Greenville Station, and the TPSS at the Greenville Station in Alameda County.

Tracy General Plan

Portions of the Tracy to Lathrop Alignment Variant 1, Single Track; Tracy to Lathrop Alignment Variant 2, Double Track; and Downtown Tracy Station would fall within the boundaries of the Tracy General Plan. The Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track would use the existing rail line that travels through Tracy, requiring minor vegetation removal and tree trimming in flat rural areas. This would result in minor visual changes that would be in keeping with city policies. Therefore, impacts on scenic quality due to conflicts with policies in the Tracy General Plan due to implementation of the Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track would be less than significant.

The utilitarian design of proposed features at the Downtown Tracy Station have the potential to conflict with Community Character Policy CC-1.P3, which requires that new development and redevelopment use high-quality urban designs, architecture, and landscaping, including, but not limited to, “human-scaled design, pedestrian-orientation, interconnectivity of street layout, siting buildings to hold corners, entryways, focal points and landmarks.” To accommodate the parking demand before 2040, the Downtown Tracy Station would include the expansion of the existing parking lot plus the construction of a surface parking lot at the southwest corner of the North Central Avenue/West 6th Street intersection, as shown in Figure 2-6A. To accommodate the parking demand after 2040, a new three-level parking garage would be constructed at the corner of North Central Avenue and West 4th Street for the Downtown Tracy Station, as shown in Figure 2-6B. The three-level parking garage would look similar to the parking garage proposed for the Downtown Tracy Station Parking Alternative 1, analyzed below under *Alternatives Analyzed at Equal Level of Detail*, which is shown in the “After Project” view of KOP 9, in Figure 3.1-10. As shown in this figure, the parking garage would be taller than surrounding structures, which would create a visual intrusion compared with existing conditions and conflict with nearby residential areas. In addition, the architectural style may not complement existing buildings that are associated with the Multi-

Modal Center and the visual quality would be reduced. Therefore, the impact on scenic quality due to conflicts with policies in the Tracy General Plan would be potentially significant for the Downtown Tracy Station (due to the three-level parking garage proposed for 2040).

Lathrop General Plan

Portions of the Tracy to Lathrop Alignment Variant 1, Single Track; Tracy to Lathrop Alignment Variant 2, Double Track; North Lathrop Station; the TPSS at the North Lathrop Station; and the TPSS transmission connection to the PG&E Howland Road Substation would fall within the boundaries of the Lathrop General Plan. The Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track would use the existing rail line that travels through Lathrop and require minor vegetation removal and tree trimming in flat rural areas. This would result in minor visual changes that would be in keeping with city policies. Therefore, impacts on scenic quality due to conflicts with policies in the Lathrop General Plan due to implementation of the Tracy to Lathrop Alignment Variant 1, Single Track and Tracy to Lathrop Alignment Variant 2, Double Track would be less than significant.

The utilitarian design of North Lathrop Station has the potential to conflict with Commercial and Industrial Area Policies 2 and 4, which require the visual interface between commercial/industrial areas and residential areas to be designed and developed so as to avoid the obtrusive visual impacts of commercial or industrial activities on nearby residential areas. Street trees, frontage landscaping, and shade trees for off-street parking areas may be required during plan review. The station's pedestrian overpass would be taller than surrounding structures and lit at night, which could be viewed as visually obtrusive and could conflict with nearby residential areas. Therefore, this impact on scenic quality due to conflicts with policies in the Lathrop General Plan is potentially significant due to implementation of the North Lathrop Station.

To supply power for the BEMU technology variant, transmission poles and lines would be needed to supply power to the TPSS at the North Lathrop Station via the PG&E Howland Road Substation along McKinley Avenue, Louise Avenue, and Howland Road. Due to the dominance of existing development and transmission lines along these local roadways, the addition of a new TPSS north of North Lathrop Road and transmission lines would not be very noticeably in the landscape, unless the TPSS at the North Lathrop Station uses bright colors that stand out in the landscape, causing potentially significant impacts.

Alternatives Analyzed at Equal Level of Detail

The Southfront Road Station Alternative would directly affect vegetation along landscaped freeway segments. This vegetation would be affected by modifications to the edge of I-580 and result in the removal of a few trees or shrubs as well as groundcover at each location. Because these removals could affect the classification of each segment as a landscaped freeway, the impact from the Southfront Road Station Alternative is considered potentially significant.

The Southfront Road Station Alternative would also fall within the boundaries of the Livermore General Plan, which has policies to protect hillsides from development, protect scenic views, prevent excessive nighttime lighting to preserve the night sky, and use attractive design treatments for development. Impacts associated with nighttime lighting are discussed under Impact AES-5. From I-580, the Southfront Road Station Alternative platform would look like the platform at Dublin/Pleasanton Station, shown in Figure 3.1-2, because it would also be in the freeway median. The parking lot along Southfront Road (including the expanded surface parking in 2040) would

conform to the flat terrain and would not greatly stand out in views because the site is surrounded by industrial land uses. The expansion of surface parking in 2040 would not be very noticeable and would be a visual expansion of visual conditions at the site once it has been implemented. The visual quality of the site would very likely be improved once parking lot landscaping matures. However, until then, light standards and the pedestrian overpass would create lighter-colored vertical features that would be noticeable to viewers and could detract from scenic views that are protected by the City of Livermore. Therefore, this impact is potentially significant.

The Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternative 2 would fall within the boundaries of the *Tracy General Plan* (City of Tracy 2011). The Downtown Tracy Station Parking Alternative 1 would include construction of a three-level parking structure at the site of the existing surface parking lot at the corner of North Central Avenue and West 4th Street. As shown in the “After Project” view of KOP 9, in Figure 3.1-10, the parking garage would be taller than surrounding structures, which would create a visual intrusion compared with existing conditions and conflict with nearby residential areas. In addition, the architectural style would not complement existing buildings, which are associated with the Multi-Modal Center. Trees planted in the existing parking lot would be removed, and only a small amount of landscaping would be visible around the perimeter base of the structure. The Downtown Tracy Station Parking Alternative 1 would not greatly disrupt the visual quality of viewsheds because the design would maintain the compositional balance between natural landforms and vegetation. The visual quality of KOP 9 would be reduced from *moderately high* to *moderate* (refer to Simulation Rating Forms in Appendix J). Therefore, this impact on scenic quality due to conflicts with policies in the Tracy General Plan is potentially significant for the Downtown Tracy Station Parking Alternative 1.

The Downtown Tracy Station Parking Alternative 2 would include the construction of a three-level parking structure at the southwest corner of the North Central Avenue/West 6th Street. The utilitarian design of this alternative has the potential to conflict with *Tracy General Plan’s* Community Character Policy CC-1.P3, which requires that new development and redevelopment use high-quality urban designs, architecture, and landscaping, including, but not limited to, “human-scaled design, pedestrian-orientation, interconnectivity of street layout, siting buildings to hold corners, entryways, focal points and landmarks.” As shown in the “After Project” view of KOP 10, in Figure 3.1-11, the parking garage under the Downtown Tracy Station Parking Alternative 2 would be taller than surrounding structures, which would create a visual intrusion compared with existing conditions and conflict with nearby residential areas. In addition, the architectural style would not complement existing buildings, which are associated with the Multi-Modal Center. Trees planted in the existing parking lot would be removed, and only a small amount of landscaping would be visible around the perimeter base of the structure. The Downtown Tracy Station Parking Alternative 2 would not greatly disrupt the visual quality of viewsheds because the design would maintain the compositional balance between natural landforms and vegetation. The visual quality of KOP 10 would be reduced from *moderately high* to *moderate* (refer to Simulation Rating Forms in Appendix J). Therefore, this impact on scenic quality due to conflicts with policies in the Tracy General Plan is potentially significant for the Downtown Tracy Station Parking Alternative 2.

The Stone Cut Alignment Alternative, Mountain House Station Alternative, and West Tracy OMF Alternative would fall in non-urbanized areas and would not conflict with applicable zoning and other regulations governing scenic quality in urbanized areas and would thus result in no impact.

Mitigation Measures

The following mitigation measures below would be implemented for specific facilities (e.g., parking, TPSS, etc.) located within the Tri-Valley Alignment, Dublin/Pleasanton Station, Isabel Station, Greenville Station (including the TPSS), Downtown Tracy Station, and North Lathrop Station (including the TPSS). The text of the mitigation measures identifies which mitigation would apply to which specific facility.

In addition, the following mitigation measure below would also be implemented for specific facilities located within the Southfront Road Station Alternative and the Downtown Tracy Station Parking Alternatives 1 and 2. The text of the mitigation measures identifies which mitigation would apply to which specific facility.

Mitigation Measure AES-2.1: Landscape parking facilities at stations

Refer to measure description under Impact AES-2.

Mitigation Measure AES-2.2: Apply aesthetic design treatments to parking structures, pedestrian overcrossings, Interim OMF, viaduct structures, and retaining walls with high visibility along I-580 and from roadways within the Altamont Hills

Refer to measure description under Impact AES-2.

Mitigation Measure AES-2.3: Utilize selective grading and planting techniques in the Altamont Hills

Refer to measure description under Impact AES-2.

Mitigation Measure AES-2.4: Underground new electric transmission lines in visually sensitive areas

Refer to measure description under Impact AES-2.

Mitigation Measure AES-2.5: Apply aesthetic surface treatments to certain structures in visually sensitive areas

Refer to measure description under Impact AES-2.

Mitigation Measure AES-3.1: Replace disturbed vegetation along landscaped freeways

The Authority will work with the appropriate Caltrans district landscape architect to determine if disturbed portions of landscaped freeways (as defined in Table 3.1-2 in this section) require replanting and to what extent. At a minimum, trees and shrubs will be replaced at a 1:1 ratio. Container sizes and species will be determined in coordination with the appropriate Caltrans district landscape architect. Disturbed groundcover will be replanted to match existing groundcover unless the Caltrans district landscape architect specifies otherwise. Irrigation of replacement plants will also be coordinated with the appropriate Caltrans district landscape architect because watering may occur with existing irrigation systems or irrigation systems may need to be installed. Any irrigation lines that are damaged within the state right-of-way because of Project construction will be replaced per Caltrans standards in coordination with the

appropriate Caltrans district landscape architect. No invasive plant species will be planted under any circumstances.

Significance with Application of Mitigation

Implementation of Mitigation Measures AES-2.1, AES-2.2, AES-2.3, AES-2.4, AES-2.5, and AES-3.1 would reduce impacts associated with the Proposed Project, due to the following proposed alignment and stations, to a less-than-significant level: Tri-Valley Alignment, Dublin/Pleasanton Station, Isabel Station, Greenville Station (including the TPSS), Downtown Tracy Station, and North Lathrop Station (including the TPSS). This is because selective grading would ensure that new landforms would preserve and blend with hilly terrain and pedestrian overcrossings would blend with and complement the surrounding landscape. In addition, darker fencing would improve visibility through the barrier compared with standard gray metal surfaces, dark-colored overhead light standards and TPSS facilities would recede into the view, and undergrounding would prevent visual intrusions from new utilities. In addition, ancillary rail features would not stand out in the landscape and detract from views, and vegetation removed along landscaped freeway segments would be replaced.

For the same reasons listed above, implementation of Mitigation Measures AES-2.1, AES-2.2, AES-2.3, AES-2.4, and AES-2.5 would reduce the impact from the Southfront Road Station Alternative, Downtown Tracy Station Parking Alternative 1, and Downtown Tracy Station Parking Alternative 2 to a less-than-significant level.

Comparison of Alternatives

Greenville Station and the Southfront Road Station Alternative would occur in similar areas that would be close to one another and result in a similar level of impact. The Greenville Station and the Southfront Road Station Alternative would both result in a less than significant impact after mitigation.

Implementation of the Stone Cut Alignment Alternative, Mountain House Station Alternative, and West Tracy OMF Alternative instead of the proposed facilities that these alternatives would replace (portion of the Altamont Alignment, Mountain House Station, and Tracy OMF) would result in the same no impact conclusion because these alternative and proposed facilities are both located in non-urbanized areas and would not conflict with applicable zoning and other regulations governing scenic quality in urbanized areas.

Both the Downtown Tracy Parking Alternative 1 and Downtown Tracy Parking Alternative 2 would result in the same potentially significant impact due to construction of the three-level parking garages. The impact would be slightly less under the Downtown Tracy Parking Alternative 1 as compared to the Downtown Tracy Parking Alternative 2 because the parking garage footprint would be slightly smaller, although both would result in the potentially significant impact. The proposed Downtown Tracy Station would avoid the impact until 2040 by constructing surface parking lots. However, by 2040, the proposed Downtown Tracy Station would result in the same potentially significant impact due to construction of the three-level parking garage to accommodate future parking demands. Therefore, implementation of the proposed Downtown Tracy Station would result in the same potentially significant impact associated with the Downtown Tracy Parking Alternative 1 and Downtown Tracy Parking Alternative 2.

Impact AES-4: Operation of the Proposed Project could substantially damage scenic resources within a State Scenic Highway.

Level of Impact	Potentially significant (mitigation required)
	<p><u>Proposed Project</u> Tri-Valley Alignment Isabel Station Greenville Station Altamont Alignment Owens-Illinois Industrial Lead Variant 1, Single Track Owens-Illinois Industrial Lead Variant 2, Double Track Interim OMF Tracy OMF</p> <p><u>Alternatives Analyzed at an Equal Level of Detail</u> Southfront Road Station Alternative West Tracy OMF Alternative Mountain House Station Alternative</p> <p>Less than significant</p> <p><u>Proposed Project</u> Dublin/Pleasanton Station Mountain House Station</p> <p>No Impact</p> <p><u>Proposed Project</u> Tracy to Lathrop Alignment Variant 1, Single Track Tracy to Lathrop Alignment Variant 2, Double Track Downtown Tracy Station River Islands Station North Lathrop Station</p> <p><u>Alternatives Analyzed at an Equal Level of Detail</u> Stone Cut Alignment Alternative Downtown Tracy Station Parking Alternative 1 Downtown Tracy Station Parking Alternative 2</p>
Mitigation Measures	<p>AES-2.1: Landscape parking facilities at stations AES-2.2: Apply aesthetic design treatments to parking structures, pedestrian overcrossings, Interim OMF, viaduct structures, and retaining walls with high visibility along I-580 and from roadways within the Altamont Hills AES-2.3: Utilize selective grading and planting techniques in the Altamont Hills AES-2.4: Underground new electric transmission lines in visually sensitive areas AES-2.5: Apply aesthetic surface treatments to certain structures in visually sensitive areas AES-3.1: Replace disturbed vegetation along landscaped freeways</p>
Level of Impact after Mitigation	Less than Significant

Impact Characterization

Impacts associated with scenic corridors would result if the Proposed Project and the alternatives analyzed at an equal level of detail would introduce structures into the viewshed of a scenic route that would detract from the quality of views or block views, remove vegetation or affect historic structures that contribute to the aesthetic quality of the route, substantially alter the terrain, or alter the character of the corridor. These impacts are discussed in Impacts AES-1 and AES-2 and summarized here.

KOPs that are representative of the visual character of the Proposed Project visible from scenic routes within the Tri-Valley and Tracy to Lathrop segments are identified in Figures 3.1-1a through 3.1-1c. Figures 3.1-2 through Figures 3.1-12 show the KOPs and their associated simulations.

Impact Detail and Conclusions

Proposed Project

The Tri-Valley Alignment, Dublin/Pleasanton Station, Isabel Station, Greenville Station, Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track), Interim OMF, Mountain House Station, and Tracy OMF would fall within view of scenic corridors that are protected by regulations. As such, this analysis focuses on the potential impacts from these proposed alignments, stations, and OMFs.

The Tracy to Lathrop Alignment Variant 1, Single Track; Tracy to Lathrop Alignment Variant 2, Double Track; Downtown Tracy Station; River Islands Station; North Lathrop Station would not fall within view of scenic corridors that are protected by regulations and would, therefore, result in no impacts.

Dublin/Pleasanton Station

As shown in the “After Project” view of KOP 1, in Figure 3.1-2, the new Valley Link platform that would be located adjacent to the existing BART platform at Dublin/Pleasanton Station would not differ greatly from existing conditions. However, the fencing and overhead lights associated with the platform would create vertical features that may be noticeable to viewers, but they are in keeping with the existing lights and fencing along the existing platform. Impacts associated with nighttime lighting are discussed under Impact AES-5. No vegetation is present at or near the existing station, which is in the middle of the freeway; therefore, no vegetation would be removed.

Dublin/Pleasanton Station would not greatly disrupt the visual quality of viewsheds because the design would maintain the compositional balance between natural landforms and vegetation. The visual quality of KOP 1 would remain *moderate* (refer to Simulation Rating Forms in Appendix J). The new Valley Link platform would not affect views of the ridgelines, hilltops, and foothills because the development surrounding the station is dense and limits such views. Therefore, impacts would be less than significant.

Tri-Valley Alignment, Isabel Station, Greenville Station

The City of Livermore General Plan prescribes a means for analyzing visual impacts on scenic routes that occur within different subareas along I-580. The Tri-Valley Alignment and Isabel Station would fall within the subareas that require this analysis; however, the Greenville Station would fall outside these subareas.

The Tri-Valley Alignment would occur within the freeway right-of-way but not on either side of the freeway. This would require I-580 to be modified and slightly widened to accommodate the proposed rail line, which would affect vegetation along landscaped freeway segments. This would slightly affect vegetation on either side of the Alameda County scenic route, as described under Impact AES-3, but would not affect views to the hills and canyons beyond. In addition, because the proposed rail line would be at-grade along the freeway, there would be no elevated structures that could affect views in the area or views from adjacent scenic routes in Dublin or Livermore, as identified in Appendix J, Table J-2.2. The alignment would also not affect views that contribute to I-580's eligibility as a State Scenic Highway along much of the proposed alignment's length. However, the Tri-Valley Alignment connections to Greenville Station would require elevated rail viaducts, which could detract from views of the hillsides from I-580 if not properly designed. The platforms would not be readily visible, and the parking lots (including the expanded surface parking in 2040) would conform to the terrain at the Greenville Station. However, as shown in the "After Project" view of KOP 3, in Figure 3.1-4, the fencing and overhead lights associated with the parking lot would create lighter-colored vertical features that would be noticeable to viewers from I-580 and Greenville and Altamont Pass Roads, which are Alameda County and Livermore scenic routes. The Greenville Station would not greatly disrupt the visual quality of viewsheds because the designs would generally maintain the compositional balance between natural landforms and vegetation once landscaping matures. However, until then, light standards, the large surface area at maximum build out of the parking lots, retaining walls, and fencing would create lighter-colored vertical features that would be noticeable to viewers and could detract from scenic views that are protected by Alameda County and Livermore. In addition, new retaining walls along I-580 could detract from views associated with scenic routes if not properly designed. Therefore, impacts for the Tri-Valley Alignment and Greenville Station would be potentially significant.

Isabel Station would also introduce elevated structures because they would have pedestrian overpasses and/or station platforms within the I-580 median, as shown in the "After Project" view of KOP 2 in Figure 3.1-3, which would be noticeable to viewers from I-580. The surface parking lot for Isabel Station (including the surface parking expansion proposed in 2040) would be flat; therefore, it would not interfere with views from I-580. In addition, Isabel Station would fall within the 1000-foot exemption zone identified in Figure 4-5 of the Community Character Element for the Isabel interchange. This exception states that "development may take place outside of the view angle envelope where it is located within a 1,000-foot radius of the future interchange of Isabel Avenue and I-580, as shown in Figure 4-5." Furthermore, Section C of the Community Character Element, Exceptions/Exemptions to I-580 Scenic Corridor Development Requirements, states that an exception/exemption applies where "the development on the lot does not detract from the scenic value of the corridor, it is determined that new public works projects or elements render the development no longer visible from a view point along I-580, the development consists of public works projects and facilities of public necessity, and the development does not exceed a view angle created by an existing structure" (City of Livermore 2014). Beyond falling within the exception zone, the Isabel Station pedestrian overpass would be within 500 feet of the existing SR-84/Isabel Avenue bridge over I-580 but would not be taller than the existing bridge. Therefore, the overpass would not interfere with views to scenic resources or affect views from adjacent scenic routes in Dublin or Livermore, as identified in Appendix J, Table J-2.2. However, if not properly designed, the pedestrian overpass and features associated with the station platform (fencing, railings, etc.) could detract from views from I-580. In addition, the Isabel Station would construct a two- to three-level parking garage, as shown in Figure 2-3B, to accommodate parking demands after 2040. The multi-level parking garage would be of similar height to the station platforms and would be partially screened

in the spring and summer by mature trees located along the edges of the proposed garage. The garage would be most visible from the I-580 eastbound on- and off-ramps and partially visible from I-580 in the fall and winter when vegetation surrounding the station site is not in leaf. The proposed parking garage would introduce an additional structure into the landscape and would create a visual intrusion compared with existing conditions and compared with conditions of the Proposed Project prior to 2040, reducing the visual quality. Therefore, impacts associated with Isabel Station would be potentially significant.

Altamont Alignment

The Altamont Alignment would follow segments of existing rail lines and an existing dirt road. It would require only minimal grading. Therefore, this alignment would not affect scenic resources on either side of an Alameda or San Joaquin County scenic route, nor would it affect views to the hills and canyons beyond. In addition, there would be no elevated structures that could affect views (for the DMU, HBMU, and DLH technology variants). It would also not affect views that contribute to I-580's eligibility or official designation as a State Scenic Highway. Therefore, impacts would be less than significant.

For the BEMU technology variant, OCS poles and wires would be introduced along the rail corridor through the Altamont Hills. As shown in the "After Project" views for KOPs 4 through 6 in Figures 3.1-5 through 3.1-7, the rail line follows an existing dirt and gravel right-of-way and would not stand out greatly in views from Altamont Pass Road (an Alameda County scenic route) or I-580 (an Eligible State Scenic Highway and an Alameda County designated scenic route). The OCS poles and wires would parallel the tracks, be readily visible, and increase the amount of aboveground utilities seen in views from these scenic roadways. As seen in KOP 4, single- and double-poled transmission lines, a radio tower, and wind turbines are present within the existing viewshed. The proposed OCS poles and wires would increase the amount aboveground infrastructure present and create visual clutter in foreground views from Altamont Pass Road. The visual quality of KOP 4 would be reduced from *high* to *moderately high* (refer to the Simulation Rating Forms in Appendix J). As seen in KOP 5, taller and shorter single- poled transmission lines are present within the existing viewshed from Altamont Pass Road. The proposed OCS poles and wires would increase the amount aboveground infrastructure present in this view, but they do not detract from or dominate views due to their apparent height and scale from this vantage from Altamont Pass Road. The visual quality of KOP 5 would be slightly reduced but would remain *moderately high* (refer to the Simulation Rating Forms in Appendix J). As seen in KOP 6, large wind turbines are present within the existing viewshed from I-580. The proposed OCS poles and wires would increase the amount aboveground infrastructure present and detract from views from I-580. The visual quality of KOP 6 would be slightly reduced but would remain *moderate* (refer to the Simulation Rating Forms in Appendix J).

Transmission lines and wind turbines are common visual features within the Altamont Hills. However, due to the scenic nature of views within the Altamont Hills, many may consider the increase in aboveground utilities associated with the OCS poles and wires to constitute a new visual intrusion that detracts from the existing visual character of foreground views from local roadways and result in potentially significant impacts. Once the viewer proceeds farther away from the right-of-way, the OCS would be less and less apparent. The poles and structural elements would be the most visually apparent parts of the system. The wires would be of a small diameter and would more readily blend into the background view. The addition of the OCS is considered to have a potentially significant impact from scenic roadways within the Altamont Hills.

Interim OMF and Mountain House Station

The Interim OMF would result in a higher degree of landform alteration because more features would be accommodated in a hilly environment. As shown in the “After Project” view of KOP 5 in Figure 3.1-6, the proposed Interim OMF would remove an existing rural barn structure and broken down cars and introduce fencing, the rail line and spurs, a parking area, and utilitarian-looking structures, including a maintenance shop and equipment building. The Interim OMF would be readily visible and could affect views from Altamont Pass Road, an Alameda County scenic route. In addition, under the BEMU technology variant, the OCS poles would be readily visible and increase the amount of aboveground utilities seen in views from Altamont Pass Road. As described above, the visual quality of KOP 5 would be slightly reduced but would remain *moderately high* (refer to the Simulation Rating Forms in Appendix J). However, the Interim OMF would appear more prominent on closer approach and when traveling in the opposite direction along Altamont Pass Road. Therefore, impacts associated with the Interim OMF would be potentially significant because of the conversion of hilly open space lands due to terrain alterations; the presence of structures, railings, and fencing; large-scale surface parking lots; aboveground utilities; and ancillary features such as railroad signals, safety gates, and signal houses.

The Mountain House Station would also result in a high degree of landform alteration because it would be in a hilly environment. The Mountain House Station may be only slightly visible or not visible at all from a portion of Patterson Pass Road that is designated an Alameda County scenic route. However, as shown in the “After Project” view of KOP 8, in Figure 3.1-9, Mountain House Station does not stand out greatly from a short distance, and the access road to the station would not be noticeable from I-580. The station platform is not readily visible, and the parking lot (including the expanded surface parking in 2040) generally conforms to the terrain; however, the fencing and overhead lights associated with the parking lot would create lighter-colored vertical features that may be noticeable to viewers. The expansion of surface parking in 2040 would not be very noticeable and would be a visual expansion of visual conditions at the site once it has been implemented. Trees planted in the parking lot would also be noticeable but similar in appearance to the trees that surround the Musco Family Olive Company. The Mountain House Station would not disrupt the visual quality of viewsheds because the design would maintain the compositional balance between natural landforms and vegetation; however, it would change natural landscapes to a rail station. The visual quality of KOP 8 would remain *moderately high* (refer to Simulation Rating Forms in Appendix J). Therefore, impacts associated with Mountain House Station would be less than significant.

Tracy OMF

The Tracy OMF would be located on flat parcels of land and would require minor earthwork. Maintenance facilities would not be prominent visual features in flat areas because industrial or residential land uses dominant the views. Furthermore, rail facilities are existing visual elements. The Tracy OMF would include a solar array along the eastern portion of the site. The solar array is not likely to stand out among other features within the OMF, when seen as a whole. However, it would increase the amount of infrastructure and aboveground utilities associated with the site. Fencing and aboveground utilities would introduce new vertical features that would disrupt the visual landscape and scenic views associated with I-580, resulting in potentially significant impacts.

Alternatives Analyzed at Equal Level of Detail

The Southfront Road Station Alternative would introduce elevated structures because it would add a

pedestrian overpass to the median of I-580. The pedestrian overpass would be within 500 feet of the existing SR-84/Isabel Avenue bridge over I-580 but would not be taller than the existing bridge. Therefore, the overpass would not interfere with views to scenic resources or affect views from adjacent scenic routes in Dublin or Livermore, as identified in Appendix J, Table J-2.2. However, if not properly designed, the pedestrian overpass could detract from views from I-580. Therefore, impacts associated with Southfront Road Station Alternative would be potentially significant.

The Stone Cut Alignment Alternative would require landform alterations that would affect the appearance of the hillsides and views from Altamont Pass Road and I-580, both scenic routes. The Stone Cut Alignment Alternative tracks would not stand out greatly in views from scenic routes because the rail line would parallel the existing UPRR right-of-way. However, the OCS poles and wires would parallel the tracks, be readily visible, and increase the amount of aboveground utilities seen in views from Altamont Pass Road and I-580. As seen in KOP 6, Figure 3.1-7b, large wind turbines are present within the existing viewshed from I-580 but the proposed OCS poles and wires would increase the amount aboveground infrastructure present and detract from views from I-580. In addition, the Stone Cut Alignment Alternative would result in a large slope cut that would be readily visible from I-580. Retaining wall structures would also be needed to support the slopes in proximity to I-580 underpass. However, the retaining walls would not likely be visible from I-580 because they would be located under the freeway and drivers pass by this location at a high rate of speed. Overall, the increase in aboveground infrastructure and presence of large slope cuts would result in potentially significant impacts associated to scenic routes.

The Mountain House Station Alternative would be located on flat parcels of land and would require minor earthwork. Station platforms and parking lots (including the expanded surface parking in 2040) would not be prominent visual features in flat areas because industrial or residential land uses dominant the views. Furthermore, rail facilities are existing visual elements. The most notable features would be the parking areas associated with the Mountain House Station Alternative, which would be planted with trees that would help soften the appearance of the parking lot. Fencing and aboveground utilities would introduce new vertical features that would disrupt the visual landscape and scenic views associated with I-580, resulting in potentially significant impacts.

The West Tracy OMF Alternative would result in a high degree of landform alteration because it would be in a hilly environment. Views of the West Tracy OMF Alternative would be prominent from a portion of Patterson Pass Road that is designated an Alameda County scenic route. The West Tracy OMF Alternative would result in a high degree of landform alteration because more features would be accommodated in a hilly environment. It would introduce structures such as a maintenance shop and equipment building. The West Tracy OMF Alternative would not be readily visible from I-580 because of intervening terrain; portions of the facility may be visible in the distance but would not stand out in views. However, the facility would be more readily visible and could affect views from Patterson Pass Road. Therefore, impacts associated with the West Tracy OMF Alternative would be potentially significant because of the conversion of hilly open space lands due to terrain alterations; the presence of structures, railings, and fencing; large-scale surface parking lots; aboveground utilities; and ancillary features such as railroad signals, safety gates, and signal houses.

The Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternatives 2 would not fall within view of scenic corridors that are protected by regulations. Therefore, there would be no impact.

Mitigation Measures

The following mitigation measures below would be implemented to minimize operation-related impacts for the following proposed Project elements: Tri-Valley Alignment, Isabel Station, Greenville Station, Altamont Alignment (BEMU technology variant), Interim OMF, and Tracy OMF.

The following mitigation measure below would also be implemented for the Southfront Road Station Alternative, Stone Cut Alignment Alternative, Mountain House Station Alternative, and West Tracy OMF Alternative to minimize operation-related impacts.

Mitigation Measure AES-2.1: Landscape parking facilities at stations

Refer to measure description under Impact AES-2.

Mitigation Measure AES-2.2: Apply aesthetic design treatments to parking structures, pedestrian overcrossings, Interim OMF, viaduct structures, and retaining walls with high visibility along I-580 and from roadways within the Altamont Hills

Refer to measure description under Impact AES-2.

Mitigation Measure AES-2.3: Utilize selective grading and planting techniques in the Altamont Hills

Refer to measure description under Impact AES-2.

Mitigation Measure AES-2.4: Underground new electric transmission lines in visually sensitive areas

Refer to measure description under Impact AES-2.

Mitigation Measure AES-2.5: Apply aesthetic surface treatments to certain structures in visually sensitive areas

Refer to measure description under Impact AES-2.

Mitigation Measure AES-3.1: Replace disturbed vegetation along Landscaped Freeways

Refer to measure description under Impact AES-3.

Significance with Application of Mitigation

Implementation of Mitigation Measures AES-2.1, AES-2.2, AES-2.3, AES-2.4, AES-2.5, and AES-3.1 would reduce impacts associated with the Proposed Project, due to the following proposed alignment, stations, and OMFs to a less-than-significant level: Tri-Valley Alignment, Isabel Station, Greenville Station, Interim OMF, and Tracy OMF. This is because selective grading would ensure that new landforms would preserve and blend with hilly terrain and pedestrian overcrossings would blend with and complement the surrounding landscape. In addition, darker fencing would improve visibility through the barrier compared with standard gray metal surfaces, dark-colored overhead light standards would recede into the view, and undergrounding would prevent visual intrusions from new utilities. In addition, ancillary rail features would not stand out in the landscape and detract from views, and vegetation removed along landscaped freeway segments would be replaced, thereby ensuring that views associated with scenic routes would be maintained.

Implementation of Mitigation Measures AES-2.5 would reduce impacts associated with the OCS poles associated with the Altamont Alignment BEMU technology variant to a less-than-significant level. This is because dark-colored OCS poles would recede into the view compared to standard gray metal surfaces.

For the same reasons listed above, implementation of Mitigation Measures AES-2.3 and AES-2.5 would reduce the impact from operation of the Stone Cut Alignment Alternative to a less-than-significant level and implementation of Mitigation Measures AES-2.1, AES-2.2, AES-2.3, AES-2.4, AES-2.5, and AES-3.1 would reduce the impact from operation of the alternative stations and OMFs (Southfront Road Station Alternative, Mountain House Station Alternative, and West Tracy OMF Alternative) to a less-than-significant level.

Comparison of Alternatives

The proposed Greenville Station and the Southfront Road Station Alternative would occur in a similar area and be close to one another, resulting in a similar level of impact. Both the Greenville Station and the Southfront Road Station Alternative would result in a less than significant impact after mitigation.

Both the Stone Cut Alignment Alternative and the portion of the proposed Altamont Alignment that the Stone Cut Alignment Alternative would replace would require landform alterations that would affect the appearance of the hillsides and have OCS poles and wires that would parallel the tracks, be readily visible, and increase the amount of aboveground utilities seen in views from Altamont Pass Road and I-580, both scenic routes. Like the Altamont Alignment, the Stone Cut Alignment Alternative tracks would not stand out greatly in views because the rail line would parallel the existing UPRR right-of-way. However, compared to the Altamont Alignment, the Stone Cut Alignment Alternative would require a large slope cut that would be more readily visible from I-580. Both the Stone Cut Alignment Alternative and the proposed Altamont Alignment would result in a similar degree of visual impact and would both result in the same less than significant impact after mitigation.

The proposed Tracy OMF would be in rural areas with flat terrain that would require minimal grading. Therefore, it most likely would not result in a great deal of visual disruption. This facility would result in less visual impact on scenic routes compared with the West Tracy OMF Alternative. The West Tracy OMF Alternative would result in a higher degree of change because facilities would be built in an area with hilly terrain and scenic views, as seen from Patterson Pass Road and I-580. Therefore, changes associated with the West Tracy OMF Alternative would be more visually disruptive, and the associated facilities would result in a greater degree of visual impact compared with the Tracy OMF. Nonetheless, the Tracy OMF and the West Tracy OMF Alternative would both result in a less than significant impact after mitigation.

Implementation of the Mountain House Station Alternative, instead of the proposed Mountain House Station would increase the amount of impact because the Mountain House Station Alternative requires mitigation to be implemented to reduce impacts associated with parking areas and new vertical features that would disrupt the visual landscape and scenic views associated with I-580. The proposed Mountain House Station would not disrupt the visual quality of viewsheds because the design would maintain the compositional balance between natural landforms and vegetation. The proposed Mountain House Station would result in a less than significant impact (mitigation is not required for the proposed Mountain House Station). Therefore, implementation of the Mountain House Station Alternative would result in greater impacts.

Both the station alternatives (Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternative 2) and the proposed Downtown Tracy Station would result in the same no impact conclusion because they would not fall within view of scenic corridors that are protected by regulations. Therefore, there would be no difference in impacts between the station alternatives (Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternative 2) and the proposed Downtown Tracy Station.

Impact AES-5: Operation of the Proposed Project could create a new source of substantial light or glare that would adversely affect daytime or nighttime views.

Level of Impact	Potentially significant (mitigation required)
	<p><u>Proposed Project</u> Dublin/Pleasanton Station Isabel Station Greenville Station Interim OMF Mountain House Station Tracy OMF Downtown Tracy Station River Islands Station North Lathrop Station</p> <p><u>Alternatives Analyzed at an Equal Level of Detail</u> Southfront Road Station Alternative Mountain House Station Alternative Downtown Tracy Station Parking Alternative 1 Downtown Tracy Station Parking Alternative 2 West Tracy OMF Alternative</p> <p>Less than significant</p> <p><u>Proposed Project</u> Tri-Valley Alignment Altamont Alignment Owens-Illinois Industrial Lead Variant 1, Single Track Owens-Illinois Industrial Lead Variant 2, Double Track Tracy to Lathrop Alignment Variant 1, Single Track Tracy to Lathrop Alignment Variant 2, Double Track</p> <p><u>Alternatives Analyzed at an Equal Level of Detail</u> Stone Cut Alignment Alternative</p>
Mitigation Measures	<p>AES-2.1: Landscape parking facilities at stations AES-2.2: Apply aesthetic design treatments to parking structures, pedestrian overcrossings, Interim OMF, viaduct structures, and retaining walls with high visibility along I-580 and from roadways within the Altamont Hills AES-2.5: Apply aesthetic surface treatments to certain structures in visually sensitive areas AES-3.1: Replace disturbed vegetation along landscaped freeways AES-5.1: Apply minimum lighting standards</p>

Level of Impact after Mitigation Less than Significant

Impact Characterization

Parking garage, parking lot, access road, and platform lighting could include standard lighting or light-emitting diode (LED) lighting for security purposes, which could affect sensitive receptors if not properly designed. Such lighting could result in significant impacts if light spills outside site boundaries, creating a new source of nuisance lighting or glare for adjacent sensitive viewers. In particular, LED lighting can negatively affect humans by increasing nuisance light and glare, in addition to increasing ambient light glow, if proper shielding is not provided and blue-rich white light (BRWL) lamps are used (American Medical Association 2016; International Dark-Sky Association 2010a, 2010b, 2015). Studies have found that a 4,000-degree Kelvin (K) white LED light causes approximately 2.5 times more pollution than high-pressure sodium lighting with the same lumen output, which would affect sensitive receptors and more than double the perceived brightness of the night sky (Aubé et al. 2013; Falchi et al. 2011, 2016). This would result in a substantial source of nighttime light and glare that would adversely affect nighttime views in the area if lighting is not properly designed and shielding is not employed.

Glare could occur where vegetation removal decreases shading, resulting in increased glare, or where a new structure is built that introduces a surface that reflects sunlight and potentially increase glare.

Impact Detail and Conclusions**Proposed Project**

No nighttime lighting is proposed along the Tri-Valley Alignment; Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track); Tracy to Lathrop Alignment Variant 1, Single Track; and Tracy to Lathrop Alignment Variant 2, Double Track. Incremental increases in glare would occur where trees and shrubs are removed to accommodate construction of the proposed alignments. However, these changes would not substantially increase glare because areas outside the right-of-way lack dense vegetation; where present, trees outside the right-of-way would remain to shade the corridor. Safety lighting at at-grade crossings would be used when trains are passing and would not result in a notable increase in lighting in the area during the short activation time. All proposed alignments would introduce a small source of light (i.e., train headlights at night). Train headlights are a pre-existing condition along segments with existing tracks; the proposed alignments would not increase light at any one location for more than a few moments as trains pass. In locations where pre-existing tracks are not present, vehicle lights on local roadways are common and in proximity to development, which, in many cases, currently provides nighttime lighting along the corridor. In addition, the trains would move through the study area at a high speed and would not introduce a fixed source of new lighting that would affect sensitive viewer groups. Safety lighting at at-grade crossings and train headlights would not result in a notable increase in lighting in any proposed alignment. Therefore, light and glare impacts associated with the Tri-Valley Alignment; Altamont Alignment (including the Owens-Illinois Industrial Lead Variant 1, Single Track and Owens-Illinois Industrial Lead Variant 2, Double Track); Tracy to Lathrop Alignment Variant 1, Single Track; and Tracy to Lathrop Alignment Variant 2, Double Track would be less than significant.

The Dublin/Pleasanton Station would expand the existing station and add new lighting along the northern edge of the new platform. The Isabel Station, Greenville Station, Tracy OMF, River Islands Station, and North Lathrop Station would construct new station platforms, maintenance facilities, and parking areas where none presently exist. Isabel Station would construct a pedestrian overpass where one does not presently exist. The overpass would be lit. However, there is an existing parking lot with existing lighting. The existing parking lot lighting would be replaced with new lighting. In addition, Isabel Station would construct a parking garage with interior structure lighting. The River Islands Station would also construct pedestrian overpasses where none presently exist that would be lit. The Interim OMF and Mountain House Station would introduce station and OMF buildings in hilly areas where there is little to no development. The Tracy OMF would include a solar array along the eastern portion of the site. Solar panels are generally oriented southward facing, so that they would not create glare for drivers on Schulte Road. In addition, the existing commercial building located east of the proposed array does not have west facing windows that would be affected by any glare coming off the panels. Glare from the panels is not likely to be an issue for drivers along eastbound I-580 due to distance and intervening features at the OMF facility that would prevent such glare. The Downtown Tracy Station would construct a parking garage with interior structure lighting. New sources of lighting, especially BRWL LED lighting, at all stations and maintenance facilities would result in potentially significant impacts. As described earlier, LED lighting can negatively affect humans by increasing nuisance light and glare, in addition to increasing ambient light glow if proper shielding is not provided and BRWL lamps are used (American Medical Association 2016; International Dark-Sky Association 2010a, 2010b, 2015). Studies have found that a 4,000K white LED light causes approximately 2.5 times more pollution than high-pressure sodium lighting with the same lumen output, which would affect sensitive receptors and more than double the perceived brightness of the night sky (Aubé et al. 2013; Falchi et al. 2011, 2016).

The expansion of existing bridges would not increase glare because a bridge surface is a pre-existing condition. The OCS poles associated with the Altamont Alignment BEMU technology variant are not likely to increase glare because they would be made of grey metal with a dull finish. The Isabel Station, River Islands Station, and North Lathrop Station pedestrian overpasses, as well as the elevated aerial viaduct structures associated with Greenville Station, would create new surfaces that would reflect light. The proposed structures could increase glare because of the materials used. This could increase glare for travelers on I-580, Greenville Road, and Altamont Pass Road or heading to the River Islands community, in addition to recreationists and drivers on local roadways around the stations, resulting in potentially significant impacts.

Alternatives Analyzed at Equal Level of Detail

The Southfront Road Station Alternative, West Tracy OMF Alternative, and Mountain House Station Alternative would construct new station platforms, maintenance facilities, and parking areas where none presently exist. The West Tracy OMF Alternative would introduce OMF buildings in hilly areas where there is little to no development. The Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternative 2 would expand or construct new parking areas with new lighting and a parking garage with interior structure lighting. New sources of lighting, especially BRWL LED lighting, at all stations and maintenance facilities would result in potentially significant impacts.

In addition, the elevated aerial viaduct structures associated the Southfront Road Station Alternative would create new surfaces that would reflect light due to the materials used. This could increase

glare for travelers on I-580, in addition to recreationists and drivers on local roadways around the station, resulting in potentially significant impacts.

Nighttime lighting is not proposed along the Stone Cut Alignment Alternative. The Stone Cut Alignment Alternative would have a similar impact as the proposed alignments. Incremental increases in glare would occur where trees and shrubs are removed to accommodate construction of the Stone Cut Alignment Alternative. However, these changes would not substantially increase glare because areas outside the right-of-way do not have substantial tree cover. The Stone Cut Alignment Alternative would introduce a small source of light (i.e., train headlights at night). Train headlights are a pre-existing condition along segments with existing tracks; the Stone Cut Alignment Alternative would not increase light at any one location for more than a few moments as trains pass. In locations where pre-existing tracks are not present, vehicle lights on local roadways are common and currently provides nighttime lighting along the corridor. In addition, the trains would move through the study area at a high speed and would not introduce a fixed source of new lighting that would affect sensitive viewer groups. Therefore, light and glare impacts associated with the Stone Cut Alignment Alternative would be less than significant.

Mitigation Measures

The following mitigation measures below would be implemented to minimize operation-related light and glare impacts for the following proposed stations and OMFs: Dublin/Pleasanton Station; Isabel Station; Greenville Station; Interim OMF; Mountain House Station; Tracy OMF; Downtown Tracy Station; River Islands Station; and North Lathrop Station.

The following mitigation measure below would also be implemented for the alternative stations and OMFs (Southfront Road Station Alternative, Mountain House Station Alternative, West Tracy OMF Alternative, Downtown Tracy Station Parking Alternative 1, and Downtown Tracy Station Parking Alternative 2) to minimize operation-related light and glare impacts.

Mitigation Measure AES-2.1: Landscape parking facilities at stations

Refer to measure description under Impact AES-2.

Mitigation Measure AES-2.2: Apply aesthetic design treatments to parking structures, pedestrian overcrossings, Interim OMF, viaduct structures, and retaining walls with high visibility along I-580 and from roadways within the Altamont Hills

Refer to measure description under Impact AES-2.

Mitigation Measure AES-2.5: Apply aesthetic surface treatments to certain structures in visually sensitive areas

Refer to measure description under Impact AES-2.

Mitigation Measure AES-3.1: Replace disturbed vegetation along landscaped freeways

Refer to measure description under Impact AES-3.

Mitigation Measure AES-5.1: Apply minimum lighting standards

This measure applies to all permanent sources of lighting installed as part of the Proposed Project and the alternatives analyzed at an equal level of detail.

All artificial outdoor lighting will be limited to safety and security requirements, designed using the Illuminating Engineering Society's design guidelines, and in compliance with International Dark-Sky Association–approved fixtures. All lighting will be designed to have minimum impact on the surrounding environment and use downcast cut-off type fixtures that direct light only toward objects requiring illumination. Shielding will be used where needed to ensure that light pollution is minimized. Therefore, lights will be installed at the lowest allowable height to cast low-angle illumination that minimizes incidental light spill onto adjacent properties and open spaces or backscatter into the nighttime sky. The lowest allowable illuminance level will be used for all lighted areas, and the number of nighttime lights needed to light an area will be minimized to the highest degree possible. Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency, with daylight sensors or timed with an on/off program. Parking garage lighting will be designed to meet safety requirements but will use locational motion-activated sensing, with regular-intensity lighting when a person is near a row of vehicles, then lower-intensity lighting after a period of inactivity when no one is near the vehicles. Lights will provide good color rendering, with natural light qualities and the minimum intensity feasible for security, safety, and personnel access needs. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing.

All LED lighting will avoid the use of BRWL lamps or a correlated color temperature that is higher than 3,000 degrees K (International Dark-Sky Association 2010a, 2010b, 2015). Wherever possible and pragmatic, the Authority will use fixtures and lighting control systems that conform to the International Dark-Sky Associations' Fixture Seal of Approval program. In addition, LED lights will use shielding to ensure that nuisance glare and light spill do not affect sensitive residential viewers.

Luminaires will be chosen for the ability to provide horizontal and vertical beam control for better control in directing what is illuminated. Luminaires will also incorporate photometric reflector systems that are designed to reduce light pollution. Lights in parking lots and along pathways and station platforms will employ shielding to minimize off-site light spill, ambient light glow, and glare. They will also be screened and directed away from residences and adjacent uses to the highest degree possible. The amount of nighttime lights used will be minimized to the highest degree possible to ensure that spaces are not unnecessarily over-lit while still maintaining minimum adequate lighting to provide necessary visibility for security. For example, the amount of light can be reduced by limiting ornamental light posts to higher-use areas and using bollard lighting on travelway portions of the pathways.

To ensure safety, interior parking structure lighting would be allowed, but the unnecessary overuse of interior nighttime lighting would be minimized such that the structure is not over-lit when not actively in use.

Technologies to reduce light pollution evolve over time. Current design measures may help control light pollution but may not be the most effective means of control once the Project is designed. Therefore, all design measures used to reduce light pollution will employ the technologies available at the time of Project design to allow for the highest potential reduction in light pollution.

Significance with Application of Mitigation

Implementation of Mitigation Measures AES-2.1, AES-2.2, AES-2.5, AES-3.1, and AES-5.1 would reduce impacts associated with the Proposed Project, due to the following proposed stations and OMF to a less-than-significant level: Dublin/Pleasanton Station; Isabel Station; Greenville Station; Interim OMF; Mountain House Station; Tracy OMF; Downtown Tracy Station; River Islands Station; and North Lathrop Station. This is because landscaping at parking facilities would filter new sources of lighting, reduce the potential for structures and ancillary site features to create glare, and replace sources of shade along the landscaped freeway. Furthermore, lighting would be designed in a manner that would not contribute to light pollution or nuisance glare.

For the same reasons listed above, implementation of Mitigation Measures AES-2.1, AES-2.2, AES-2.5, AES-3.1, and AES-5.1 would reduce the impact from operation of the alternative stations and OMF (Southfront Road Station Alternative, Mountain House Station Alternative, West Tracy OMF Alternative, Downtown Tracy Station Parking Alternative 1, Downtown Tracy Station Parking Alternative) to a less-than-significant level.

Comparison of Alternatives

The proposed Greenville Station and the Southfront Road Station Alternative would be near developed areas but bordering on open space areas that are not lit; therefore, lighting may be a little more noticeable at these locations. However, both would result in a similar level of impact (less than significant after mitigation) because they would be in visually similar areas, and the sites would be close to one another.

The Stone Cut Alignment Alternative and the portion of the proposed Altamont Alignment that the Stone Cut Alignment Alternative would replace, would both be located in undeveloped areas within the Altamont Hills. Both would result in a similar level of impact (less than significant) because the following conditions apply at both sites: no nighttime lighting is proposed, small sources of lights would occur in areas where train headlights are a pre-existing condition, vehicle lights are common in the area, and trains would move through the study area at a high speed and would not introduce a fixed source of new lighting.

The West Tracy Maintenance OMF Alternative would be in a hilly area where there is little to no development or lighting; therefore, the proposed lighting would be more visible compared to the proposed Tracy OMF. Lighting associated with the Tracy OMF would not be as noticeable because it would be in rural areas; however, it would be among rural and industrial development with existing lighting. Therefore, lighting at the Tracy OMF would not affect views from scenic routes as much as lighting at the West Tracy OMF Alternative. The West Tracy OMF Alternative would have a greater degree of impact from light and glare than the Tracy OMF. Nonetheless, the Tracy OMF and the West Tracy OMF Alternative would result in a less than significant impact after mitigation.

Similarly, the proposed Mountain House Station would introduce station platforms and parking in hilly areas where there is little to no development, while the Mountain House Station Alternative would construct new station platforms and parking areas where none presently exist. Both would result in a similar level of impact (less than significant after mitigation) because they would both add facilities where few are present.

The proposed Downtown Tracy Station and the station alternatives (Downtown Tracy Station Parking Alternative 1 and Downtown Tracy Station Parking Alternative) would both result in a

similar level of impact (less than significant after mitigation) because they would be in visually similar areas and the sites would be close to one another.