

## 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 and the Atwater Station Alternative. It also describes the impacts on aesthetic resources that would result from implementation of the Proposed Project and the Atwater Station Alternative and mitigation measures that would reduce significant impacts, where feasible and appropriate. Appendix H, *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 3.1.3, *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 Atwater Station Alternative.

#### 3.1.2.1 Federal

There are no federally designated National Wild and Scenic Rivers (U.S. Fish and Wildlife Service 2020) or National Scenic Byways (Federal Highway Administration 2020) in the study area. No lands administered by the Bureau of Land Management would be affected (Bureau of Land Management 2020). No national parks or monuments are located in the study area (National Park Service 2020). There are no National Historic Trails or National Wildlife Refuges in the study area.

#### National Historic Preservation Act

The National Historic Preservation Act (NHPA) establishes the federal government policy on historic 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 the property's setting that contribute to its historic significance, or introduction of visual elements that diminish the integrity of the property's significant historic features (16 United States Code 470 et seq.). Section 3.5, *Cultural Resources*, documents and analyzes impacts on historic properties, including how visual changes resulting from the Proposed Project and the Atwater Station Alternative would affect such resources.

#### 3.1.2.2 State

There are no state-designated Wild and Scenic Rivers in the study area (California Public Resources Code § 5093.54). No state parks are in the study area (California Protected Areas Data Portal 2020).

#### State Scenic Roadways and Highways

There are no officially designated or eligible state scenic highways within 3 miles of the environmental footprint (California Department of Transportation 2019a).

## Designated Landscaped Freeways

Several designated landscaped freeways are within view of the Proposed Project (California Department of Transportation 2019b). Freeways within 3 miles in rural settings and within a half mile in urban areas of the corridor are considered in this analysis and are listed in Table 3.1-1.

**Table 3.1-1. Designated Landscaped Freeways Potentially in View of the Proposed Project**

County	Freeway	Freeway Segment (Post Mile Limits)
Stanislaus	SR 99	R2.83/R3.87
		R7.86/8.69
		R11.24/R11.90
		R12.91/R14.92
Merced	SR 99	11.14/12.98
		12.98/13.30
		13.71/16.00
		16.00/16.06
		16.06/16.18
		16.44/17.08
		22.30/23.05
		23.28/23.47
		23.59/24.10
		24.40/25.73
		26.90/27.52
		28.84/30.57
		33.17/34.43

Sources: California Department of Transportation 2019b, 2020.

SR = State Route.

R = First realignment.

As defined by the Outdoor Advertising Act (California Business and Professions Code [Cal. BPC] § 5216), a landscaped freeway “means a section or sections of a freeway that is now, or hereafter may be, improved by the planting at least on one side or on the median of the freeway ROW of lawns, trees, shrubs, flowers, or other ornamental vegetation requiring reasonable maintenance.”

Landscaped freeways must have planting areas that are at least 1,000 feet in length that are in healthy condition and improve the aesthetic appearance of the highway. Functional plantings (i.e., plantings for erosion control, traffic safety, reduction of fire hazards, and traffic noise abatement, or other non-ornamental purposes) do not qualify (4 California Code of Regulations [Cal. Code Regs.] § 2508). Per Cal. BPC Section 5440, the placement of advertising is prohibited within 1,000 feet of the edge of the right-of-way (ROW) of a landscaped freeway.

### 3.1.2.3 Regional and Local

The San Joaquin Regional Rail Commission (SJRRRC), a state joint powers agency, proposes improvements inside and outside of the Union Pacific Railroad (UPRR) ROW. The Interstate Commerce Commission Termination Act (ICCTA) affords railroads engaged in interstate commerce

considerable flexibility in making necessary improvements and modifications to rail infrastructure,<sup>1</sup> subject to the requirements of the Surface Transportation Board (STB). ICCTA broadly preempts state and local regulation of railroads, and this preemption extends to the construction and operation of rail lines. As such, activities within the UPRR ROW are clearly exempt from local building and zoning codes and other land use ordinances. However, facilities located outside of the UPRR ROW, including proposed stations, the proposed Merced Layover & Maintenance Facility, and the Atwater Station Alternative would be subject to regional and local plans and regulations. Though ICCTA does broadly preempt state and local regulation of railroads, SJRRC intends to obtain local agency permits for construction of facilities that fall outside of the UPRR ROW even though SJRRC has not determined that such permits are legally necessary or required.

Appendix G of this EIR, *Regional Plans and Local General Plans*, provides a list of applicable goals, policies, and objectives from regional and local plans of the jurisdictions in which the Proposed Project and the Atwater Station Alternative improvements are proposed. Section 15125(d) of the California Environmental Quality Act (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 the preparation of this analysis and were reviewed to assess whether the Proposed Project and the Atwater Station Alternative would be consistent with the plans of relevant jurisdictions.<sup>2</sup> The Proposed Project and the Atwater Station Alternative would be generally consistent with the applicable goals, policies, and objectives related to aesthetic resources identified in Appendix G in particular because the Proposed Project alignment follows existing railroads and/or existing roadways.

## County- and City-Designated Scenic Routes

Table 3.1-2 lists county- and city-designated scenic routes within 3 miles of the Proposed Project and the Atwater Station Alternative.

**Table 3.1-2. County- and City-Designated Scenic Routes within 3 Miles of the Proposed Project**

County or City	Roads
<i>Stanislaus County</i>	None
Ceres and Turlock	None
<i>Merced County</i>	None
Livingston	None
Atwater	Atwater Boulevard First Street Bellevue Road Shaffer Road Winton Way Broadway from Winton Way to First Street Buhach Road

<sup>1</sup> The Altamont Corridor Express (ACE) operates within a ROW and on tracks owned by UPRR, which operates interstate freight rail service in the same ROW and on the same tracks.

<sup>2</sup> 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.

County or City	Roads
Merced	Third Street
	Part of Grove Avenue
	All entrances to the city
	North and South Bear Creek Drive within the city limits
	N Street from 16th Street to the Merced County Courthouse
	21st Street from the Merced County Courthouse to Glen Avenue
	M Street from Black Rascal Creek to Bellevue Road
	West 28th Street from M Street to G Street
	R Street (extended) from Black Rascal Creek to Bellevue Road
	Olive Avenue East of McKee Road
	M Street from 18th Street to Bear Creek
	Campus Parkway

### 3.1.3 Methods of Analysis

Aesthetic resources are all objects (artificial and natural, moving and stationary) and features (e.g., landforms and waterbodies) visible on a landscape. These resources add to or detract from the scenic quality (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, or 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 area of visual effects (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 AVE, their visual preferences, and their sensitivity to changes associated with the Proposed Project and the Atwater Station Alternative. 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.

- Establishing the AVE for aesthetics resources and determining landscape units.
- Inventorying and describing the affected environment, affected viewers, and existing visual quality, and identification of key viewpoints (KVP) and views for visual assessment.
- Assessing visual compatibility and viewer sensitivity and analyzing the project's visual impacts.
- Proposing methods to mitigate significant visual impacts.

These research and analysis methods used to determine the effects discussed in Section 3.1.5, *Impact Analysis*, are described in detail in Appendix H, *Supporting Aesthetics Information*. The

methods for evaluating impacts may include data collection methods and sources, 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 Atwater Station Alternative could cause impacts and to consider the context and intensity of these impacts.

The methods for evaluating impacts are intended to satisfy the federal and state requirements, including 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 project. Those conditions, in turn, “will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant” (14 Cal. Code Regs. 15125[a]).

### 3.1.4 Environmental Setting

This section discusses the environmental setting related to aesthetic resources in the AVE.

#### 3.1.4.1 Ceres to Merced Extension Alignment

##### Existing Visual Resources

The most important visual resources within the viewshed of the Ceres to Merced Extension Alignment, based on analysis of aerial and satellite mapping, site surveys, and review of policy documents, are as follows.

- **Diablo Range and Sierra Nevada:** The grassy hillsides and distant oak woodlands of the Diablo Range and the conifer forests and snow-capped mountains of the Sierra Nevada are visible from the rail corridor where elevation and breaks in development and vegetation allow for views.
- **Atwater Boulevard, First Street, Shaffer Road, Winton Way, Broadway from Winton Way to First Street, Buhach Road, Third Street, Entrances to Atwater, and M Street from 18th Street to Bear Creek:** City-designated scenic routes with views of the Ceres to Merced Extension Alignment (Appendix H, *Supporting Aesthetics Information*).
- **Summerfaire Park, Broadway Park, Central Park, Shattuck Educational Park:** Parks, trails, and recreational areas that have views of the rail line.
- **Merced River:** Natural river corridor with riparian areas passing under the tracks.

##### Viewer Groups and Existing Viewer Sensitivity

Viewer groups of the Ceres to Merced Extension Alignment are recreationists using local roadways and recreational areas adjacent to the tracks; roadway users traveling on State Route (SR) 99 and local roadways; and residential, commercial, industrial, and institutional (e.g., schools) viewers bordering the tracks (Appendix H, *Supporting Aesthetics Information*).

##### Existing Visual Character and Quality

The AVE comprises flat, vegetated open space areas that include orchards, row crops, vineyards, and grassy, vacant parcels that are common to rural areas in the San Joaquin Valley; residential, commercial, industrial, and institutional landscaping and vacant parcels that are common to developed areas in the valley; and intermittent background views of the Diablo Range. Permanent

waterbodies in the AVE are the Upper Lateral Number 2 and a half, Lateral Number 3, and Upper Lateral Number 4, Lateral Number 5, Lateral Number 6, High Fine Canal, Merced River, Hammatt Lateral, Arena Canal, Atwater Canal, Buhach Lateral, Canal Creek, Trindale Drain, El Capitan Canal, and Bear Creek. Atmospheric visibility can range from moderately high to moderate due to weather patterns that can include limited seasonal haze, seasonal rain, and overcast weather conditions. The existing natural setting can range from being more harmonious in rural areas to less harmonious in areas with industrial development, contributing to a natural setting that ranges from *moderately low* to *moderate* in natural harmony.

The cultural environment in the AVE consists of residential, commercial, industrial, and institutional uses that border the tracks in Keyes, Turlock, Delhi, Livingston, Atwater, Fergus, Merced, and smaller rural development. SR 99 is a prominent transportation corridor that parallels the existing tracks. Local roadways, aboveground utility infrastructure (utility poles with lines), fencing, and sound barriers separating residences from the tracks and transportation corridors also contribute to the cultural environment. Residential, commercial, and rural development along the rail corridor is common to the valley cultural landscape. The industrial areas tend to be disjointed and detract from the nearby suburban setting, contributing to a cultural setting that ranges from *moderately low* to *moderate* in cultural order.

The AVE consists of existing single and double track alignments that blend fairly well with the landscape in rural and developed settings, as it parallels SR 99 for most of its length. The AVE is mostly compatible with the natural and cultural environments, resulting in *moderate* site coherence.

The overall visual quality of the Ceres to Merced Extension Alignment site is *moderately low* to *moderate*.

### Light and Glare

Daytime light and glare levels associated with the Ceres to Merced Extension Alignment site and vicinity range from *moderately low* to *moderately high* due to the rural and suburbanized and industrial settings. Nighttime light and glare levels associated with the Ceres to Merced Extension Alignment site and vicinity also range from *moderately low* to *moderately high* because of low lighting levels in rural areas and higher lighting levels in suburbanized and industrial. Lighting along the Ceres to Merced Extension Alignment primarily comes from street lighting associated with SR 99 and local roadways, vehicle headlights, and light coming from developed areas.

## 3.1.4.2 Turlock Station

### Existing Visual Resources

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

- **Diablo Range:** The grassy hillsides and distant oak woodlands of the Diablo Range are slightly visible to the west from the rail corridor, in close proximity to the station, down Fulkerth Road/West Hawkeye Avenue, where the roadway corridor creates a break in development and vegetation to allow for views.
- **Summerfaire Park:** Recreational area that has a view of the Turlock Station.

## Viewer Groups and Existing Viewer Sensitivity

Viewer groups of the Turlock Station are recreationists using local roadways and recreational areas near the station; roadway users traveling on local roadways; and residential, commercial, and industrial viewers bordering the tracks and proposed station site (Appendix H, *Supporting Aesthetics Information*).

## Existing Visual Character and Quality

The natural environment that comprises the AVE for the Turlock Station includes residential, commercial, and industrial landscaping and grassy, vacant parcels that are common to developed areas in the valley and intermittent background views of the Diablo Range. Atmospheric visibility can range from *moderately high* to *moderate* due to weather patterns that can include limited seasonal haze, seasonal rain, and overcast weather conditions. The natural environment is somewhat harmonious because the AVE is well-vegetated with manicured lawns and mature trees located within nearby parks and roadway medians, surrounding residences and apartments, bordering industrial sites, and lining the UPRR ROW. In addition, the Turlock Transit Center is surrounded by formal landscaping. This all contributes to a natural setting that is *moderate* in natural harmony.

The cultural environment consists of residential, commercial, park, and industrial uses that surround the station site in Turlock and consists of development patterns that are common to the valley cultural landscape. Most of these features are well-maintained. Local roadways, aboveground utility infrastructure (utility poles with lines), and fencing also contribute to the cultural environment. The industrial areas are disjointed and detract slightly from the nearby suburban setting, contributing to a cultural setting that is *moderate* in cultural order.

The Turlock Station would include a station platform within the UPRR ROW and a connection to the Turlock Transit Station via a pedestrian overcrossing that spans Golden State Boulevard and Front Street and provides access to the station platform. Parking for the station would be provided by using up to 50 of the existing paved parking spaces in the Turlock Transit Center parking lot and 261 spaces of street parking would be created along the dirt shoulders of North Front Street, from Golden State Boulevard to East Canal Drive. Trees lining the UPRR ROW near the intersection of West Hawkeye Avenue and Golden State Boulevard provide some screening of the station site during the spring and summer when trees are in leaf. The AVE is mostly compatible with the natural and cultural environments, resulting in *moderate* site coherence.

The overall visual quality of the Turlock Station site is *moderate*.

## Light and Glare

Daytime light and glare levels associated with the Turlock Station site and vicinity are *moderate* due to the suburbanized and commercial setting combined with the presence of mature trees. Nighttime light and glare levels associated with Turlock Station site and vicinity are also *moderate* because of higher lighting levels in this developed area. The station site is unlit. Therefore, lighting at the site comes from lighting associated with streetlights and traffic lights along local roadways, vehicle headlights, and light coming from developed areas.

### 3.1.4.3 Livingston Station

#### Existing Visual Resources

Based on analysis of aerial and satellite mapping, site surveys, and review of policy documents, there are no sensitive visual resources within the viewshed of the Livingston Station.

#### Viewer Groups and Existing Viewer Sensitivity

Viewer groups of the Livingston Station are recreationists using local roadways adjacent to the tracks; roadway users traveling on local roadways; and residential and commercial viewers bordering the tracks (Appendix H, *Supporting Aesthetics Information*). Roadway users traveling on SR 99 do not have direct views of the station site because the freeway is depressed and at a lower elevation than the station site and berms and landscaping along the freeway limit views for freeway travelers.

#### Existing Visual Character and Quality

The natural environment that comprises the AVE for the Livingston Station includes residential and commercial landscaping; grassy, vacant parcels; and landscaping along SR 99. Atmospheric visibility can range from *moderately high* to *moderate* due to weather patterns that can include limited seasonal haze, seasonal rain, and overcast weather conditions. The existing natural setting is somewhat harmonious but lacks cohesive landscaping and vegetative cover contributing to a natural setting that is *moderate* in natural harmony.

The cultural environment consists of residential, commercial, and industrial uses that border the station site in Livingston. SR 99 is a prominent transportation corridor that parallels the existing tracks and station site. Local roadways, aboveground utility infrastructure (utility poles with lines) and fencing also contribute to the cultural environment. Residential and commercial development surrounding the station site is common to the valley cultural landscape. The cultural landscape surrounding the station site is slightly disjointed because commercial and industrial development surrounding the site lacks design cohesion and SR 99 segments development within Livingston, contributing to a cultural setting that is *moderate* in cultural order.

The proposed Livingston Station site is located on a parcel that is comprised of a grassy field that is adjacent to a small warehouse, east of Main Street, between the existing tracks and SR 99. There are no trees on the station site. Commercial uses, a limited number of industrial areas, and a few single-family residences are located adjacent to the site. The AVE is mostly compatible with the natural and cultural environments, resulting in *moderate* site coherence.

The overall visual quality of the Livingston Station site is *moderate*.

#### Light and Glare

Daytime light and glare levels associated with the Livingston Station site and vicinity are *moderate* due to the developed setting. Nighttime light and glare levels associated with the Livingston Station site and vicinity are also *moderate* because of lighting levels in developed areas. Lighting at the site is limited to security lighting on the warehouse building and lighting at the site primarily comes from street lighting associated with SR 99 and local roadways, vehicle headlights, and light coming from developed areas.



### 3.1.4.4 Atwater Station Alternative

#### Existing Visual Resources

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

- **Bloss Home:** The Bloss Home is a State Historic Landmark and is listed on the National Register of Historic Place. The home also serves as a museum. The grounds surrounding the home offer a park-like setting.
- **Bloss Park:** Bloss Park is a City of Atwater park located directly north of the Bloss Home and serves as a visual extension of the Bloss Home and grounds.

#### Viewer Groups and Existing Viewer Sensitivity

Viewer groups of the Atwater Station Alternative site are recreationists using local roadways adjacent to the station and proposed surface parking lot; roadway users traveling on local roadways; and residential, commercial, industrial, and institutional (e.g., schools) viewers bordering the tracks (Appendix H, *Supporting Aesthetics Information*).

#### Existing Visual Character and Quality

The natural environment that comprises the AVE for the Atwater Station Alternative includes residential, commercial, industrial, and institutional landscaping, dense vegetation associated with the Bloss Home and Bloss Park, and grassy, vacant parcels that are common to developed areas in the San Joaquin Valley. Atmospheric visibility can range from *moderately high* to *moderate* due to weather patterns that can include limited seasonal haze, seasonal rain, and overcast weather conditions. The existing natural environment ranges from being less harmonious closer to the station site and more harmonious near the proposed parking lot, near the Bloss Home. This contributes to a natural setting that is *moderate* in natural harmony.

The cultural environment consists of residential, commercial, industrial, and institutional uses that border the station site in Atwater. A KFC restaurant, used appliance store, a number of vacant storefronts, several isolated residences, and a small apartment complex are located immediately north of the station site and adjacent to the Main Parking Lot and where the East Parking Lot would be constructed. Land uses gradually transition to more residential land uses the further north of the station site, across from the Bloss Home. The existing rail line borders the station site to the south. SR 99 is a prominent transportation corridor that parallels the existing tracks and proposed station within 800 feet. The Teasdale Foods plant and industrial work yards are located between the existing tracks and SR 99. Local roadways, aboveground utility infrastructure (utility poles with lines), and fencing also contribute to the cultural environment. The commercial, warehouse, and industrial areas tend to be disjointed but these uses smoothly transition to the nearby residential land uses, contributing to a cultural setting that is *moderate* in cultural order.

The proposed Atwater Station Alternative site is located on parcels that are currently developed with commercial uses (auto repair shop, Atwater Feed, and an abandoned gas station and car wash) and the Atwater Transpo bus station, east of Applegate Road, between the existing tracks and Atwater Boulevard. The only existing landscaping is associated with the Atwater Transpo bus

station and is located where the Main Lot would be located. Commercial uses and a few residences border the site. The proposed East Lot is paved and includes an old, concrete building pad. The AVE is compatible with the natural and cultural environments, resulting in *moderate* site coherence.

The overall visual quality of the Atwater Station Alternative site is *moderate*.

## Light and Glare

Daytime light and glare levels associated with the Atwater Station Alternative site and vicinity are *moderate* due to the developed setting. Nighttime light and glare levels associated with the Atwater Station Alternative site and vicinity are also *moderate* because of lighting levels in developed areas. Lighting at the station site is limited to security lighting associated with the bus station and other commercial uses at the station site. The site is also lit by street lighting associated with SR 99 and local roadways, vehicle headlights, and light coming from adjacent developed areas.

### 3.1.4.5 Merced Layover & Maintenance Facility

#### Existing Visual Resources

The most important visual resources within the viewshed of the Merced Layover & Maintenance Facility based on analysis of aerial and satellite mapping, site surveys, and review of policy documents, are as follows.

- **Diablo Range and Sierra Nevada:** The grassy hillsides and distant oak woodlands of the Diablo Range and the conifer forests and snow-capped mountains of the Sierra Nevada are visible from SR 99, which is adjacent to the layover and maintenance facility, because it bridges over the rail corridor and its elevation allows for views.

#### Viewer Groups and Existing Viewer Sensitivity

Viewer groups of the Merced Layover & Maintenance Facility are recreationists using local roadways adjacent to the tracks and the proposed layover and maintenance facility; roadway users traveling on SR 99 and local roadways; and residential, commercial, and industrial, and institutional (e.g., places of worship) viewers bordering the tracks and layover and maintenance facility (Appendix H, *Supporting Aesthetics Information*).

#### Existing Visual Character and Quality

The natural environment that comprises the AVE for the Merced Layover & Maintenance Facility includes residential, commercial, industrial, and institutional landscaping that is sparse and vacant, grassy parcels that are common to developed areas in the San Joaquin Valley and intermittent background views of the Diablo Range. Atmospheric visibility can range from *moderately high* to *moderate* due to weather patterns that can include limited seasonal haze, seasonal rain, and overcast weather conditions. Bear Creek is located to the west of the layover and maintenance facility but is not visible from the site. The existing setting is somewhat disharmonious due to an abrupt transition between residential and industrial land uses, contributing to a natural environment that is *moderately low* in natural harmony.

The cultural environment consists of smaller scale residential and institutional structures and large-scale commercial and industrial structures and land uses that border the layover and maintenance facility. SR 99 is a prominent transportation corridor that roughly parallels and crosses over the

existing tracks near the site. In addition, SR 59 is a busy local roadway that provides access to the western border of Merced and provides access to the layover and maintenance facility. Local roadways, aboveground utility infrastructure (utility poles with lines), and fencing also contribute to the cultural environment. Residential, commercial, and institutional development along the rail corridor surrounding the layover and maintenance facility is common to the valley cultural landscape. The industrial area is disjointed and detracts from the nearby suburban setting, contributing to a cultural setting that is *moderately low* in cultural order.

The Merced Layover & Maintenance Facility is located on the Morning Star Merced site that is north of the UPRR ROW. The site supports a large processing and warehouse facility and is surrounded by industrial and commercial land uses to the north, south, and west, with residential and institutional land uses to the east. Approximately 70 percent of the site is paved and includes paving around the facility and paved storage yards. However, the remainder of the site consists of vacant, grassy lands that border the eastern and western ends of the site along SR 59 and Cooper Avenue, respectively. There is also an existing rail spur that splits from the mainline and parallels SR 59, traveling north, and then curves and travels west between the Morning Star Merced plant and industrial and commercial land uses immediately to the north of the site. An industrial facility and SR 99 border the UPRR ROW to the east, and Bear Creek is located just to the west of the facility. The AVE is mostly compatible with the natural and cultural environments, resulting in *moderate* site coherence.

The overall visual quality of the Merced Layover & Maintenance Facility site is *moderately low*.

## Light and Glare

Daytime light and glare levels associated with the Merced Layover & Maintenance Facility site are *moderate* due to the suburbanized and industrial settings. Nighttime light and glare levels associated with the Merced Layover & Maintenance Facility site and vicinity are also *moderate* because of higher lighting levels associated with the suburbanized and industrial land uses.

### 3.1.4.6 Merced Station

#### Existing Visual Resources

Based on analysis of aerial and satellite mapping, site surveys, and review of policy documents, there are no sensitive visual resources within the viewshed of the Merced Station.

#### Viewer Groups and Existing Viewer Sensitivity

Viewer groups of the Merced Station are recreationists using local roadways; roadway users traveling on SR 99 and local roadways; and residential, commercial, and industrial viewers bordering the tracks and station site (Appendix H, *Supporting Aesthetics Information*).

#### Existing Visual Character and Quality

The natural environment that comprises the AVE for the Merced Station includes residential, commercial, and industrial landscaping and grassy, vacant parcels that are common to developed areas in the San Joaquin Valley. Atmospheric visibility can range from *moderately high* to *moderate* due to weather patterns that can include limited seasonal haze, seasonal rain, and overcast weather conditions. The existing natural setting is not very harmonious because there is little cohesion in

landscaping and vegetative cover, contributing to a natural setting that is *moderately low* in natural harmony.

The cultural environment consists of residential, commercial, warehouse, and industrial uses that border the site and consists of development patterns that are common to the valley cultural landscape. The existing rail line also borders the station site to the north. SR 99 is a prominent transportation corridor that parallels the existing tracks within 800 feet and segments residential land uses to the north and south. Local roadways, aboveground utility infrastructure (utility poles with lines), and fencing also contribute to the cultural environment. The commercial, warehouse, and industrial areas tend to be disjointed and detract from residential land uses, contributing to a cultural setting that is *moderately low* in cultural order.

The current location of the proposed parking lot for the Merced Station contains a Courtesy Rent A Car store and the Merced City School District Food Services and Print Shop Warehouse. There is a grassy, vacant lot located between these two facilities, and both of these facilities support paved parking lots. There is no landscaping associated with the Merced City School District facility, but there is a grassy mow strip and trees along 15th and R Streets associated with the rental car facility and shrubs surrounding the remainder of the perimeter. The AVE is mostly compatible with the natural and cultural environments, resulting in *moderate* site coherence.

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

### Light and Glare

Daytime light and glare levels associated with the Merced Station site and vicinity are *moderate* due to the developed setting. Nighttime light and glare levels associated with the Merced Station site and vicinity are also *moderate* because of lighting levels associated with lighting associated with commercial uses at the site and lighting coming from street lighting associated with SR 99 and local roadways, vehicle headlights, and light coming from adjacent developed areas.

## 3.1.5 Impact Analysis

This section describes the environmental impacts of the Proposed Project and Atwater Station Alternative on aesthetic resources. It describes the thresholds used to determine whether an impact would be significant and identified impacts applying those thresholds. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts are provided, where appropriate.

### 3.1.5.1 Thresholds of Significance

The CEQA Guidelines Appendix G (14 Cal. Code Regs. 15000 et seq.) has identified 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 project 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, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- Create a new source of substantial light or glare that would adversely affect day or nighttime views near the project improvements.

### 3.1.5.2 Impacts and Mitigation Measures

<b>Impact AES-1</b>	Construction of the Proposed Project could substantially degrade the existing visual character or quality of the site and its surroundings, including scenic vistas and scenic highways, and could create a new source of substantial light or glare that would adversely affect day or nighttime views.
<b>Level of Impact</b>	<b>Potentially significant impact</b>
<b>Mitigation Measures</b>	AES-1.1: Install visual barriers between construction work areas and sensitive receptors AES-1.2: Limit construction near residences to daylight hours AES-1.3: Minimize fugitive light from portable sources used for construction
<b>Level of Impact after Mitigation</b>	<b>Less than significant impact</b>

### Impact Characterization - Construction

#### Proposed Project

Visual changes resulting from introducing construction activities and equipment into the viewsheds of all user groups would be temporary. Construction of the Proposed Project would generally occur in a linear fashion along the UPRR corridor. Construction would affect all viewers adjacent to or in the environmental footprint. Impacts would be greater where there are more viewers and where larger portions of the project improvements would be visible. Construction may be visible from some locations with scenic vista views such as from 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 from adjacent multilevel buildings of the surrounding hillsides would not be blocked by construction activities. The following construction impacts would be common to the Ceres to Merced Extension Alignment, the new proposed stations, and the Merced Layover & Maintenance Facility.

#### *Introduce Industrial-Looking Elements into the Viewshed*

All viewer groups are likely to be accustomed to seeing machinery, trucks, and vehicles within the environmental footprint because roadway improvement projects, development projects, agriculture and ranching, and rail maintenance activities require the use of such equipment. 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 to viewsheds. Such features would be less pronounced in urban and suburban areas but more pronounced in rural areas.

### ***Increase Fugitive Dust and Noise in the Viewshed***

Construction activities involving heavy equipment use, soil and material transport, and land clearing in the ROW, along public roadways, and at construction staging areas would create fugitive dust and would introduce noise. The aesthetic disruptions would be less pronounced in urban areas but more pronounced in rural areas.

### ***Invade Privacy of Residential Viewers***

Residential viewers could have construction activities occurring adjacent to their homes, or nearby, which may evoke a sense of invaded privacy.

### ***Remove and Trim Vegetation***

Vegetation clearance within the existing rail corridor is a current and ongoing activity conducted for the physical safety of passing trains. While evidence of construction activity would be noticeable to area residents and others in the vicinity, such visual disruptions would be short term and are a common and accepted feature of the urban environment. Several of the project stations would require vegetation removal to accommodate construction of station facilities and parking.

### ***Lighting and Glare***

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

### ***Summary of Construction Impacts***

Visual changes resulting from introducing construction activities and equipment into the viewsheds of all user groups would be temporary. 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. Construction activities involving heavy equipment use, soil and material transport, and land clearing in the ROW, along public roadways, and at construction staging areas would create fugitive dust. Dust clouds could hinder views, including affecting views from scenic vista points and scenic roadways, and would result in a potentially significant impact. Residential viewers could have construction activities occurring adjacent to their homes, or nearby, which may evoke a sense of invaded privacy and would result in a potentially significant impact.

### ***Atwater Station Alternative***

Construction of the Atwater Station Alternative would result in the same visual impacts as described above for the Proposed Project. Residential viewers could have construction activities occurring adjacent to their homes, or nearby, which may evoke a sense of invaded privacy and would result in a potentially significant impact.

## Mitigation Measures

Mitigation Measures AES-1.1 through AES-1.3 would apply to the Proposed Project and the Atwater Station Alternative for aesthetic impacts during construction.

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

The San Joaquin Regional Rail Commission (SJRRRC) or its contractor(s) will install visual barriers between stationary construction work areas and sensitive receptors (e.g. residents and recreational areas) to reduce the impact on sensitive receptors from invasions of privacy and the change in existing visual quality. Barriers will be placed to obscure views of stationary work areas (e.g., staging areas or areas of fixed construction) where construction activity and equipment would be disruptive and lower the existing visual quality. These efforts will include the following actions and performance standards.

- SJRRRC or its contractors(s) will install visual barriers to minimize sensitive receptor (i.e., residents and recreational areas) views of construction work areas.
- The visual barriers will be placed to protect residents and recreational areas that are located within 500 feet of a construction site where the residences or recreationists would have an unobstructed view of the construction area.
- The visual barrier may be chain link fencing with privacy slats, fencing with windscreen material, wood barrier, or other similar barrier.
- The visual barrier will be a minimum of 6 feet high to help to maintain the privacy of residents and block ground-level views toward stationary construction activities.

While the visual barriers would introduce a visual intrusion, they would greatly reduce the visual effects associated with visible construction activities, and screening construction activities would protect privacy. The visual barriers are an effective means of 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. will not take place before or past daylight hours (which vary according to season) in locations where residences are located within 500 feet of construction activities. This will reduce the amount of construction experienced by viewer groups because most construction activities would be occurring during business hours (when most viewer groups are likely to be at work) and eliminate the need to introduce high-wattage lighting sources to operate in the dark near residences.

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

At a minimum, the construction contractor will minimize Project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights will be used. Portable lights will be operated at the lowest allowable wattage and height and will be raised to a height no greater than 20 feet. All lights will be screened and directed downward toward work activities and away from the night sky and nearby residential areas to the maximum extent possible. The number of nighttime lights used will be minimized to the greatest extent possible.

## 1 Significance with Application of Mitigation

2 Implementation of Mitigation Measures AES-1.1, AES-1.2, and AES-1.3 would reduce construction  
3 impacts associated with the Proposed Project to a less-than-significant level by installing visual  
4 barriers between construction and sensitive receptors, limiting work to daylight hours adjacent to  
5 sensitive receptors, limiting construction lighting near sensitive receptors, and limiting fugitive dust.

6 For the same reasons as the Proposed Project, implementation of Mitigation Measures AES-1.1, AES-  
7 1.2, and AES-1.3 would reduce construction impacts associated with the Atwater Station Alternative  
8 to a less-than-significant level

## 9 Comparison of the Proposed Livingston Station and Atwater Station Alternative

10 Construction of the Atwater Station Alternative would result in similar visual impacts as described  
11 for the Proposed Project (including the proposed Livingston Station). However, construction of the  
12 Atwater Station Alternative would occur in an area where there is a higher concentration of  
13 sensitive viewers than the proposed Livingston Station. Nonetheless, the Atwater Station Alternative  
14 and the proposed Livingston Station would both result in a less than significant impact after  
15 mitigation.

<b>Impact AES-2</b>	Proposed Project operations could conflict with applicable zoning and other regulations governing scenic quality in an urbanized area, including scenic vistas.
<b>Level of Impact</b>	<p><b>Potentially significant impact</b></p> <p><u>Proposed Project</u> Ceres to Merced Extension Alignment (in urbanized areas) Merced Layover &amp; Maintenance Facility Turlock Station Livingston Station Merced Station</p> <p><u>Alternative Analyzed at an Equal Level of Detail</u> Atwater Station Alternative</p> <p><b>No Impact</b> <u>Proposed Project</u> Ceres to Merced Extension Alignment (in non-urbanized areas)</p>
<b>Mitigation Measures</b>	<p>AES-2.1: Landscape parking facilities</p> <p>AES-2.2: Apply aesthetic design treatments to pedestrian bridges over tracks and bridges with visibility to residents and recreationists</p> <p>AES-2.3: Underground new utilities</p> <p>AES-2.4: Apply aesthetic surface treatments to fencing and pedestrian bridge safety barriers</p> <p>AES-2.5: Replace disturbed vegetation along landscaped freeways</p>
<b>Level of Impact after Mitigation</b>	<b>Less than significant impact</b>



## Impact Characterization - Operations

Portions of the Proposed Project would be located within the urbanized areas of Ceres, Keyes, Turlock, Delhi, Livingston, Atwater, Fergus and the Atwater Station Alternative would be located within the urbanized area of Atwater. The impacts on scenic quality in these urbanized areas is discussed in this section. Portions of the Ceres to Merced Extension Alignment are located within non-urbanized areas. These portions of the Ceres to Merced Extension Alignment would have no impact on the scenic quality of urbanized areas. The impacts on the scenic quality of these non-urbanized areas are discussed in Impact AES-3. In addition, The Ceres to Merced Extension Alignment within Atwater and the Atwater Station Alternative would fall within view of scenic corridors that are protected by city regulations. Impacts associated with scenic corridors are discussed in detail under Impact AES-4. Impacts associated with lighting are discussed under Impact AES-5.

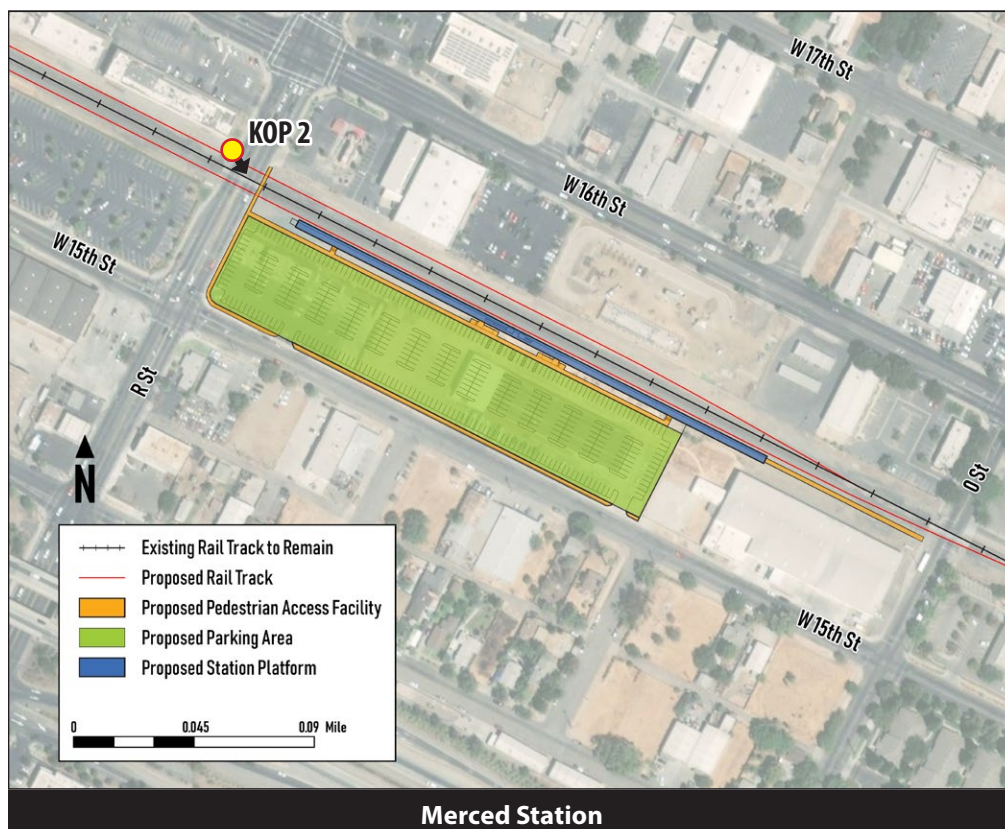
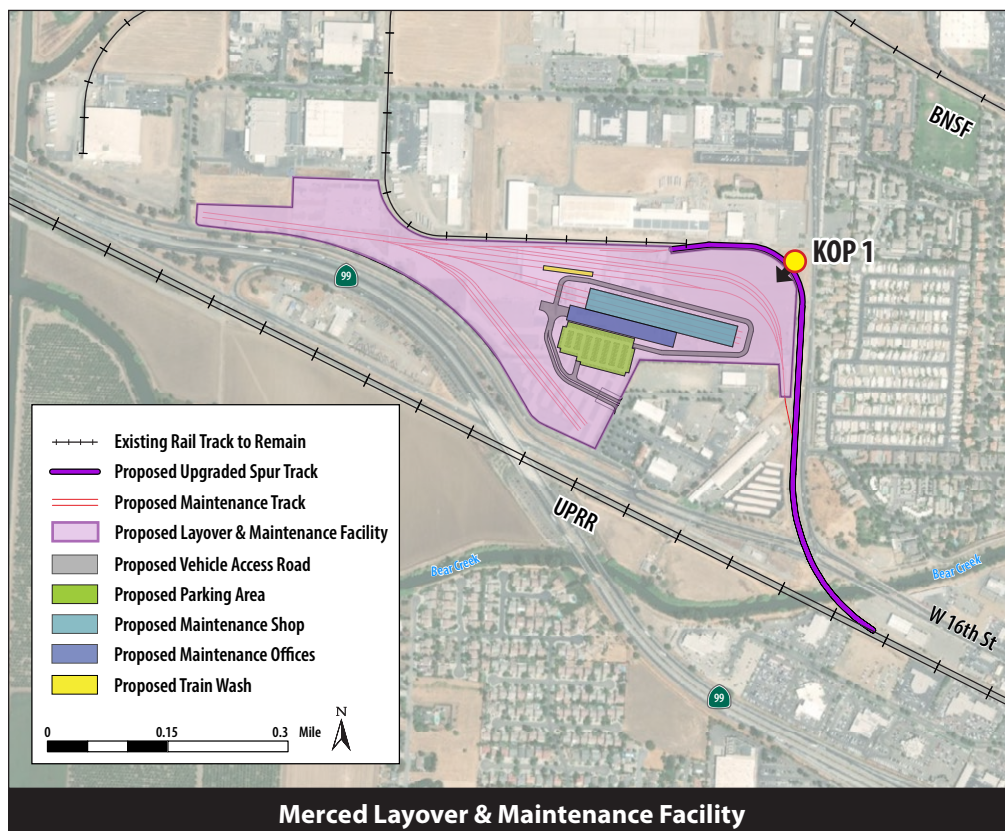
The proposed Merced Layover & Maintenance Facility, Turlock Station, Livingston Station, Merced Station, and the Atwater Station Alternative are located wholly within individual cities and are discussed under the appropriate general plan for the city within which they are located. The general plans policies discussed in this section are contained in Appendix G, *Regional Plans and Local General Plans*. KOPs that are representative of the visual character of the Proposed Project and Atwater Station Alternative within urban areas are identified in Figures 3.1-1a to 3.1-1c. Figures 3.1-2 through 3.1-6 show the KOPs and their associated simulations.

## Proposed Project

### *Landscaped Freeways*

As identified in Table 3.1-1, there are several California Department of Transportation (Caltrans)-designated landscaped freeways within view of the Proposed Project in urbanized areas. Table H-3.1 in Appendix H, *Supporting Aesthetics Information*, includes a preliminary screening of the Proposed Project features within 3 miles of landscaped freeways to determine if the proposed alignment, stations, and layover and maintenance facility require further analysis. The Proposed Project would not introduce billboards or signs along segments of landscaped freeways. Therefore, a component of the Proposed Project would need to directly affect vegetation along a landscaped freeway segment in order to affect its designation. Facilities that would not directly affect vegetation along landscaped freeway segments have been excluded from the analysis and are identified in Appendix H, *Supporting Aesthetics Information*.

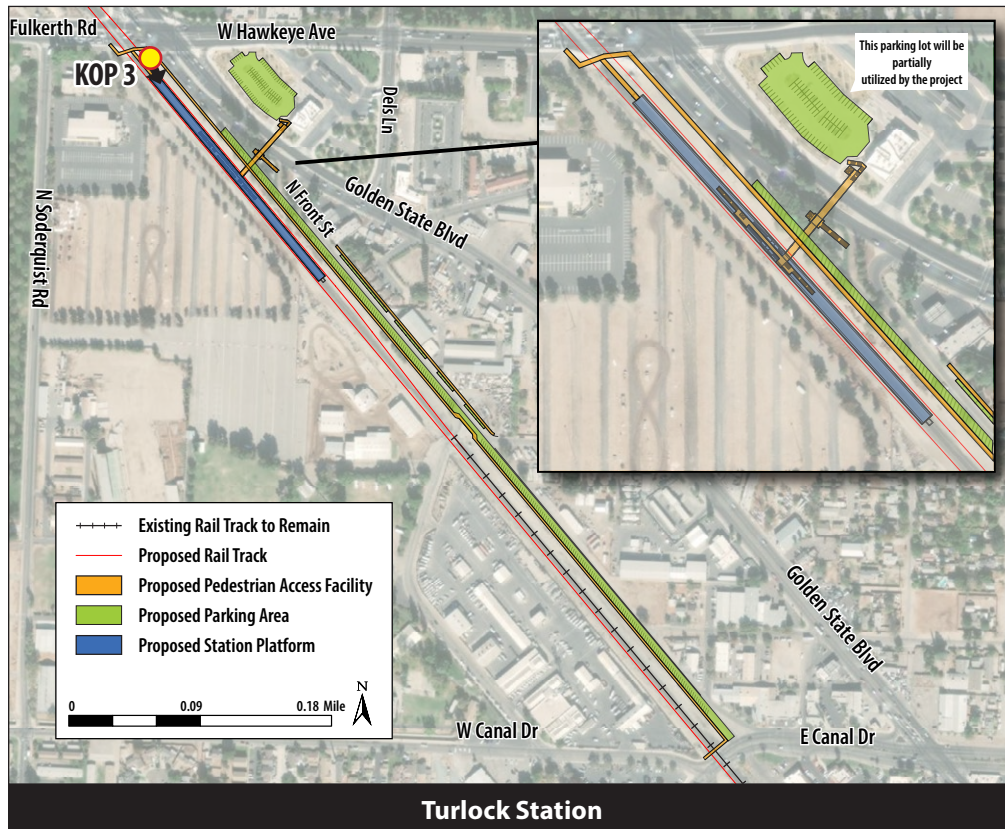
Landscaped freeway segments are located in close proximity to the Ceres to Merced Extension Alignment, but as shown in the screening analysis, many would not be affected by the alignment. However, the Ceres to Merced Extension Alignment passes by directly adjacent to landscaped freeway segments of SR 99 in Ceres (PM 11.24–11.90) and Keyes (PM 7.86–8.69). There would be some potential that some trees or shrubs could be affected during construction along both of these segments because the shrubs are located so close to the alignment. Similarly, the Ceres to Merced Extension Alignment would impact small portions of trees and shrubs along the landscaped freeway segment of SR 99 (PM 28.84–30.57) in Livingston, along both sides of the freeway, to bridge the freeway. If trees or shrubs are damaged or removed along these three segments in Ceres, Keyes, and Livingston, the removals could affect the classification of each segment as a landscaped freeway and result in potentially significant impacts.



Key Observation Point (KOP)

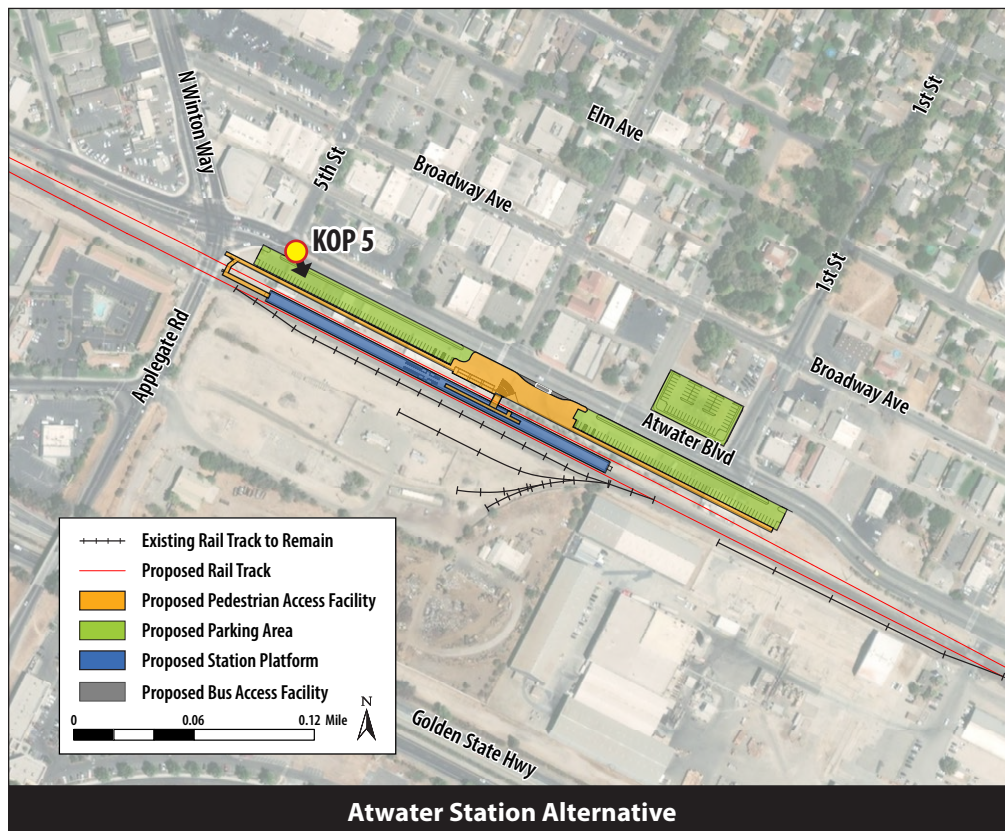
**Figure 3.1-1a**  
**Key Observation Point Location Maps**  
 ACE Ceres-Merced Extension Project





Key Observation Point (KOP)

**Figure 3.1-1b**  
**Key Observation Point Location Maps**  
 ACE Ceres-Merced Extension Project



➡ Key Observation Point (KOP)

**Figure 3.1-1c**  
**Key Observation Point Location Maps**  
 ACE Ceres-Merced Extension Project



**KOP 1 – Merced Layover Facility**

KOP 1 - Before Project



**Assumptions for Key Observation Point (KOP)**

- View from North State Highway 59 looking Southwest toward Maintenance Facility.



KOP 1 - After Project



*Visual Impact Assessment*



**KOP 2 – Merced Station**

KOP 2 - Before Project



KOP 2 - After Project



Visual Impact Assessment

**Assumptions for Key Observation Point (KOP)**

- View from R Street looking Southeast toward station.





**KOP 3 – Turlock Station**

KOP 3 - Before Project



KOP 3 - After Project



Visual Impact Assessment

**Assumptions for Key Observation Point (KOP)**

- View from North Golden State Boulevard looking Southeast toward pedestrian bridge connection to station.





**KOP 4 – Livingston Station**

KOP 4 - Before Project



KOP 4 - After Project



Visual Impact Assessment

**Assumptions for Key Observation Point (KOP)**

- View from North Main Street looking South toward station.





**KOP 5 – Atwater Station Alternative**

KOP 5 - Before Project



**Assumptions for Key Observation Point (KOP)**

- View from Atwater Boulevard looking Southeast toward station.



KOP 5 - After Project



Visual Impact Assessment

Graphics 00144.20 (2/15/21) AB

**Stanislaus County General Plan**

Keyes is located in Stanislaus County and is covered by the Stanislaus County General Plan, which contains policies that encourage the visual enhancement of areas visible from SR 99 to improve city and county community gateways and the overall visual quality of views associated with the highway and areas adjacent to the highway; the protection and preservation of natural and scenic areas in the county; improvement of the visual appearance of Keyes; reduction of walled development in Keyes; and encourages development to occur in already developed areas to preserve agricultural land, open space, and natural resources (County of Stanislaus 2015; Stanislaus Council of Governments 2018).

The Ceres to Merced Extension Alignment would be built alongside an existing rail corridor that passes through a flat landscape in Keyes. This would be a minor visual expansion of existing conditions and would generally not alter the existing visual landscape or affect the existing visual quality. Similarly, ancillary features associated with the proposed alignment (e.g., relocated railroad signals, safety gates, signal houses, power poles, relocated railroad crossings, and stop bar pavement markings) would not affect visual resources or the existing visual quality, because these are existing visual elements associated with the rail corridor that would be shifted slightly in or incrementally added to in the landscape. Therefore, the Proposed Project would preserve existing views, would not detract from existing views in Keyes, and would be consistent with policies governing scenic resources in the county. Therefore, the Proposed Project would not conflict with the Stanislaus County General Plan, and impacts would be less than significant.

**Merced County General Plan**

Delhi and Fergus are located in Merced County and are covered by the Merced County General Plan and county municipal code, which contain policies that encourage the preservation and enhancement of the visual and historic character and quality of life in its urban communities; showcase communities' natural features; streetscapes improve visual character and quality; minimize visual impacts resulting from industrial and commercial development; protect vegetation, scenic resources, and vistas; utilize design strategies to take advantage of scenic resources and minimize visual impacts; minimize lighting impacts; and encourage the planting and preservation of trees (County of Merced 2013; Merced County Association of Governments 2018). In addition, the Delhi Community Plan seeks to enhance views of Delhi from SR 99, ensure that fence and wall designs are compatible with the surrounding community, and that trees are planted within the community (County of Merced 2006).

The Ceres to Merced Extension Alignment would be built alongside an existing rail corridor that passes through a flat landscape in Delhi and Fergus. This would be a minor visual expansion of existing conditions and would generally not affect vegetation along the alignment, alter the existing visual landscape, or affect the existing visual quality. Similarly, ancillary features associated with the proposed alignment (e.g., relocated railroad signals, safety gates, signal houses, power poles, relocated railroad crossings, and stop bar pavement markings) would not affect visual resources or the existing visual quality, because these are existing visual elements associated with the rail corridor that would be shifted slightly in or incrementally added to in the landscape. Therefore, the Proposed Project would preserve existing views, would not detract from existing views in Delhi and Fergus, and would be consistent with policies governing scenic resources in the county. Therefore, the Proposed Project would not conflict with the Merced County General Plan, and impacts would be less than significant.

**Merced General Plan**

A portion of the Ceres to Merced Extension Alignment, the Merced Layover and Maintenance Facility, and the Merced Station are located in Merced and would be covered by the Merced General Plan and city municipal code, which contain policies to ensure that industrial developments along SR 99 are designed in a high-quality manner (e.g., architectural styles, site features, and landscaping); city gateways are enhanced; impacts associated with transportation corridors are minimized; scenic routes are protected and enhanced; open space areas are preserved (note, the city suggests that railroad rights-of-way should be used as an open space resource); and street trees are preserved. The general plan identifies that the area immediately east of the Merced Layover & Maintenance Facility is within the Gateways Redevelopment Project, a priority of which is that it strives to “improve the physical image of the Gateways arterials and areas” in Merced (City of Merced 2012).

The Ceres to Merced Extension Alignment would be built alongside an existing rail corridor that passes through a flat landscape in Merced. This would be a minor visual expansion of existing conditions and would generally not affect vegetation along the alignment, alter the existing visual landscape, or affect the existing visual quality. Similarly, ancillary features associated with the proposed alignment (e.g., relocated railroad signals, safety gates, signal houses, power poles, relocated railroad crossings, and stop bar pavement markings) would not affect visual resources or the existing visual quality because these are existing visual elements associated with the rail corridor that would be shifted slightly in or incrementally added to in the landscape. The proposed bridge over the Bear Creek would be installed mostly within the UPRR ROW and adjacent to existing rail bridge. This would slightly increase the presence of bridges in the landscape as seen by recreationists on the creek, and the bridges would be more noticeable to motorists compared to the new track. However, the existing bridge lacks aesthetic design treatments and has a substantial amount of graffiti, contributing to a degraded visual quality associated with the existing bridge. The new bridge over the Bear Creek would be built alongside the existing rail bridge and would be visually similar to the adjacent and existing single-track bridge and would not negatively affect the current aesthetics at the site. Therefore, this would be a minor visual expansion of existing conditions and would generally not alter the existing visual landscape or affect the existing visual quality. Therefore, the Proposed Project would preserve existing views, would not detract from existing views in Merced, and would be consistent with policies governing scenic resources in the city. Therefore, the Proposed Project would not conflict with the Merced General Plan, and impacts would be less than significant.

As shown in the “After Project” view of KOP 1 in Figure 3.1-2, the Merced Layover & Maintenance Facility would be built on industrial lands, north of the existing UPRR ROW and connected to it by an existing rail spur, in a flat landscape. The site is currently grassy or paved and partially developed with industrial development; therefore, no trees or shrubs would be removed. This component would create a large-scale, warehouse looking facility that covers much of the site where none presently exists. The visual quality of KOP 1 would be reduced from *moderate* to *moderate low* (refer to Simulation Rating Forms in Appendix H, *Supporting Aesthetics Information*). The City of Merced has a goal of maintaining attractive industrial and business park areas by requiring high quality architectural, site (signs, lights, walls, etc.), and landscape designs for industrial development along SR 99 and to provide an attractive gateway and sense of arrival into the city. The Merced Layover & Maintenance Facility would utilize an agricultural field (used to produce hay) and would be utilitarian looking. Because the Merced Layover & Maintenance Facility site is located across from a portion of the Gateway Redevelopment Project area, the facility may not meet the City of Merced’s goal of maintaining attractive industrial and business park areas and providing an attractive



gateway and sense of arrival into the city. Therefore, impacts on scenic quality due to conflicts with policies in the Merced General Plan would be potentially significant due to implementation of the Merced Layover & Maintenance Facility in the city of Merced.

The area surrounding the Merced Station includes new commercial development, but across the street is a vacant lot, a boarded-up building, an automotive repair shop, and a surface parking lot. As shown in the “After Project” view of KOP 2 in Figure 3.1-3, the Merced Station would be built on parcels with existing commercial uses with few trees or shrubs. Building removal would occur to construct the parking facilities and station platforms for the station and would remove disjointed commercial uses. As seen in the simulation, station platforms would not be a prominent visual feature associated with the station, and landscaping would improve the visual quality of the area. This would create a view that is more visually cohesive compared to existing conditions and that integrates the rail corridor to the surrounding landscape. In addition, the new parking lot would not be out of character with this block where surface parking is located on the east side of West 16th Street. The station would also require fence installation for safety. If fencing is light gray, the color would act to limit views. Coloring the barrier in a dark color improves visibility through the barrier compared with a standard gray metal surface. The visual quality of KOP 2 would be improved from *moderate low* to *moderate* (refer to Simulation Rating Forms in Appendix H, *Supporting Aesthetics Information*). However, other views associated with the station could be affected if structures at the station and ancillary station features (e.g., fencing, railings) do not blend in views and may not meet the City of Merced’s goals to ensure that impacts associated with transportation corridors are minimized. Therefore, impacts on scenic quality due to conflicts with policies in the Merced General Plan would be potentially significant due to implementation of the Merced Station in the city of Merced.

#### ***Turlock General Plan***

A portion of the Ceres to Merced Extension Alignment and the Turlock Station would be located in Turlock and would be covered by the Turlock General Plan, Northwest Triangle Specific Plan, and city municipal code, which contains policies that industrial developments minimize impacts on the community; landscaping use native vegetation; preserve trees; minimize light impacts; promote orderly and attractive development; screen parking areas; create attractive streetscapes and street fronts; and buffer incompatible uses (City of Turlock 1995, 2012).

The Ceres to Merced Extension Alignment would be built alongside an existing rail corridor that passes through a flat landscape in Turlock. This would be a minor visual expansion of existing conditions and would generally not affect vegetation along the alignment, alter the existing visual landscape, or affect the existing visual quality. Similarly, ancillary features associated with the proposed alignment (e.g., relocated railroad signals, safety gates, signal houses, power poles, relocated railroad crossings, and stop bar pavement markings) would not affect visual resources or the existing visual quality because these are existing visual elements associated with the rail corridor that would be shifted slightly in or incrementally added to in the landscape. Therefore, the Proposed Project would preserve existing views, would not detract from existing views in Turlock, and would be consistent with policies governing scenic resources in the city. Therefore, the Proposed Project would not conflict with the Turlock General Plan, and impacts would be less than significant.

The Turlock Station would construct a large-scale pedestrian overcrossing that spans Golden State Boulevard and Front Street to connect the Turlock Transit Station to the proposed station platform,

as shown in the “After Project” view of KOP 3 in Figure 3.1-4. The pedestrian overpass and light standards associated with the station would create lighter-colored vertical features that would be very noticeable to viewers. The large-scale pedestrian overcrossing, with associated elevators and stairways, would be taller than the surrounding development, creating a new, vertical visual intrusions into the viewshed, and would not blend with existing architectural styles. The Turlock Station would use existing paved parking spaces in the Turlock Transit Center parking lot and not affect resources at that site. In addition, street parking would be created along the dirt shoulders of North Front Street, from Golden State Boulevard to East Canal Drive, which would increase the area of paved surfaces along North Front Street. Trees lining the UPRR ROW between the tracks and North Front Street and Golden State Boulevard would need to be removed to accommodate construction of the station platform and pedestrian overpass. However, no buildings would need to be removed to construct the proposed station. The station would also require fence installation for safety. If fencing is light gray, the color would act to limit views. Coloring the barrier in a dark color improves visibility through the barrier compared with a standard gray metal surface. The visual quality of KOP 3 would be reduced from *moderate* to *moderate low* (refer to Simulation Rating Forms in Appendix H, *Supporting Aesthetics Information*). In addition, other views associated with the station could be affected if structures at the station and ancillary station features (e.g., fencing, railings) do not blend in views and may not meet the City of Turlock’s goals to minimize impacts to the community and promote orderly and attractive development. Therefore, impacts on scenic quality due to conflicts with policies in the Turlock General Plan and Northwest Triangle Specific Plan would be potentially significant due to implementation of the Turlock Station in the city of Turlock.

### ***Livingston General Plan***

A portion of the Ceres to Merced Extension Alignment and the Livingston Station would be located in Livingston and would be covered by the Livingston General Plan and municipal code, which contain policies that ensure that light pollution is minimized; visual impacts from industrial development are minimized; city entrances are enhanced through the use of building design and setbacks, pavement patterns, street furniture, and landscaping; streetscapes and visual clutter along streets are improved; street trees are planted; new development complements existing development; landscaping be an integral part of new development and site design; and trees are protected (City of Livingston 1999).

The Ceres to Merced Extension Alignment would be built alongside an existing rail corridor that passes through a flat landscape in Livingston. This would be a minor visual expansion of existing conditions and would generally not affect vegetation along the alignment, alter the existing visual landscape, or affect the existing visual quality. Similarly, ancillary features associated with the proposed alignment (e.g., relocated railroad signals, safety gates, signal houses, power poles, relocated railroad crossings, and stop bar pavement markings) would not affect visual resources or the existing visual quality, because these are existing visual elements associated with the rail corridor that would be shifted slightly in or incrementally added to in the landscape. The proposed bridge over the Merced River would be installed mostly within the UPRR ROW and adjacent to existing rail bridge. This would slightly increase the presence of bridges in the landscape as seen by recreationists on the river, and the bridges would be more noticeable to motorists compared to the new track. However, the existing bridge lacks aesthetic design treatments and has a substantial amount of graffiti, contributing to a degraded visual quality associated with the existing bridge. The new bridge over the Merced River would be built alongside the existing rail bridge and would be visually similar to the adjacent and existing single-track bridge and would not negatively affect the

1 current aesthetics at the site. Therefore, this would be a minor visual expansion of existing  
2 conditions and would generally not alter the existing visual landscape or affect the existing visual  
3 quality. Therefore, the Proposed Project would preserve existing views, would not detract from  
4 existing views in Livingston, and would be consistent with policies governing scenic resources in the  
5 city. Therefore, the Proposed Project would not conflict with the Livingston General Plan, and  
6 impacts would be less than significant.

7 The Livingston Station would be built on a parcel with a small warehouse, the A.V. Thomas Produce  
8 building, and a grassy field. Signage on the warehouse indicates that the business has moved, and  
9 the building is vacant. As shown in the “After Project” view of KOP 4 in Figure 3.1-5, the warehouse  
10 would be removed to construct the parking facilities and station platform for the station and would  
11 remove disjointed commercial uses and ensure that the site does not become blighted as the  
12 building would deteriorate over time. As seen in the simulation, station platforms would not be a  
13 prominent visual feature associated with the station and landscaping would increase the natural  
14 harmony of the area. This would create a view that is more visually cohesive compared to existing  
15 conditions and that integrates the rail corridor to the surrounding landscape. The station would also  
16 require fence installation for safety. If fencing is light gray, the color would act to limit views.  
17 Coloring the barrier in a dark color improves visibility through the barrier compared with a  
18 standard gray metal surface. The visual quality of KOP 4 would remain *moderate* (refer to  
19 Simulation Rating Forms in Appendix H, *Supporting Aesthetics Information*). However, other views  
20 associated with the station could be affected if structures at the station and ancillary station features  
21 (e.g., fencing, railings) do not blend in views and may not meet the City of Livingston’s goals to  
22 ensure that streetscapes are improved. Therefore, impacts on scenic quality due to conflicts with  
23 policies in the Livingston General Plan would be potentially significant due to implementation of the  
24 Livingston Station in the city of Livingston.

### 25 ***Atwater General Plan***

26 A portion of the Ceres to Merced Extension Alignment would travel through Atwater and would be  
27 covered by the Atwater General Plan and municipal code, which contain policies that encourage that  
28 city gateways and views from SR 99 are enhanced and landscaped; scenic resources and scenic  
29 routes are protected and enhanced; landscaping is used to beautify streetscapes and city gateways;  
30 prominent circulation routes do not become degraded; lighting is minimized in business parks; and  
31 street trees are preserved (City of Atwater 2000).

32 The Ceres to Merced Extension Alignment would be built alongside an existing rail corridor that  
33 passes through a flat landscape in Atwater. This would be a minor visual expansion of existing  
34 conditions and would generally not affect vegetation along the alignment, alter the existing visual  
35 landscape, or affect the existing visual quality. Similarly, ancillary features associated with the  
36 proposed alignment (e.g., relocated railroad signals, safety gates, signal houses, power poles,  
37 relocated railroad crossings, and stop bar pavement markings) would not affect visual resources or  
38 the existing visual quality, because these are existing visual elements associated with the rail  
39 corridor that would be shifted slightly in or incrementally added to in the landscape. Therefore, the  
40 Proposed Project would not affect views from SR 99, degrade prominent circulation routes, or  
41 negatively affect scenic routes; would not detract from existing views in Atwater; and would be  
42 consistent with policies governing scenic resources in the city. Therefore, the Proposed Project  
43 would not conflict with the Atwater General Plan, and impacts would be less than significant.

## Atwater Station Alternative

The Atwater Station Alternative is located in Atwater and would be covered by the Atwater General Plan and municipal code, which contain policies that encourage that city gateways and views from SR 99 are enhanced and landscaped; scenic resources and scenic routes are protected and enhanced; landscaping is used to beautify streetscapes and city gateways; prominent circulation routes do not become degraded; lighting is minimized in business parks; and street trees are preserved (City of Atwater 2000).

The Atwater Station Alternative would be built on parcels that are currently developed with commercial uses (auto repair shop, Atwater Feed, and an abandoned gas station and car wash) and the Atwater Transpo bus station. The only landscaping at the station and Main Parking Lot site is associated with the Atwater Transpo bus station, which would need to be removed to construct the station and associated parking. Similarly, the East Parking Lot is paved and includes an old, concrete building pad that would need to be removed to construct the parking lot. As shown in the “After Project” view of KOP 5 in Figure 3.1-6, the existing structures would be removed to construct the parking facilities and station platform for the station and would remove disjointed commercial uses and ensure that the site does not become blighted as the abandoned uses would deteriorate over time. As seen in the simulation, station platforms would not be a prominent visual feature associated with the station and landscaping would replace removed trees and increase the natural harmony of the area. This would create a view that is more visually cohesive compared to existing conditions and that integrates the rail corridor to the surrounding landscape. The station would also require fence installation for safety. If fencing is light gray, the color would act to limit views. Coloring the barrier in a dark color improves visibility through the barrier compared with a standard gray metal surface. The visual quality of KOP 5 would remain *moderate* (refer to Simulation Rating Forms in Appendix H, *Supporting Aesthetics Information*). However, other views associated with the station could be affected if structures at the station and ancillary station features (e.g., fencing, railings) do not blend in views and may not meet the City of Atwater’s goals to ensure that views associated with SR 99, prominent circulation routes, and scenic routes are not negatively affected. Therefore, impacts on scenic quality due to conflicts with policies in the Atwater General Plan would be potentially significant due to implementation of the Atwater Station in the city of Atwater.

## Mitigation Measures

Mitigation Measure AES-2.1 would apply to the Turlock Station, Livingston Station, Merced Layover & Maintenance Facility, Merced Station, and Atwater Station Alternative to minimize impacts associated with vegetation removal and to improve visual quality associated with the facilities. Mitigation Measure AES-2.2 would apply to the Turlock Station and Merced Layover & Maintenance Facility to ensure that the pedestrian bridge and layover and maintenance facility are designed to be complementary to surrounding environments. Mitigation Measure AES-2.3 would apply to the Turlock Station, Livingston Station, Merced Layover & Maintenance Facility, Merced Station, and Atwater Station Alternative to reduce visual impacts related to new overhead utilities. Mitigation Measure AES-2.4 would apply to the Turlock Station, Livingston Station, Merced Station, and Atwater Station Alternative to ensure that fencing and pedestrian bridge safety barriers are designed to be complementary to surrounding environments. Mitigation Measure AES-2.5 would apply to the Ceres to Merced Extension Alignment to replace removed vegetation along Caltrans-designated landscaped freeway segments.

**Mitigation Measure AES-2.1: Landscape parking facilities and the Merced Layover & Maintenance Facility**

Surface parking lots will be planted with trees and groundcovers to improve project aesthetics and to provide shade. If space allows, street trees will also be planted in association with surface parking lots, parking structures, or along major public streets associated with the Merced Layover & Maintenance Facility. Shrubs may also be used if space allows. All landscaping will be designed to ensure passenger safety (e.g., ensuring that security cameras and safety lighting are not obscured). No invasive plant species will be used under any circumstances. In addition, plant palettes will utilize drought-tolerant plant species and should have a strong emphasis on California native plant species that are appropriate for the given site. An irrigation and maintenance program will be implemented during the plant establishment period and carried on, as needed, to ensure plant survival. However, design of the landscaping plan will maximize the use of planting zones that are water efficient. Landscaped areas will be irrigated with a smart watering system that evaluates the existing site conditions and plant material against weather conditions to avoid overwatering of such areas. To avoid undue water flows, the irrigation system will be managed in such a manner that any broken spray heads, pipes, or other components are fixed within 1 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 pedestrian bridges over tracks, bridges with visibility to residents and recreationists, and to the Merced Layover & Maintenance Facility**

The Project will implement an aesthetic design treatment for new pedestrian bridges over tracks, bridges with high visibility, and to the Merced Layover & Maintenance Facility buildings. Choosing earth-toned colors for the surfaces will be less distracting to viewers than light or brightly colored surfaces. In general, light buff/tan or light gray colors stand out more than darker colors such as darker browns, red-browns, and warm grays that have the ability to complement the surrounding vegetation. The design motif applied to structures will reflect a combination of naturally colored surfaces and surfaces that are textured to appear as natural materials (e.g., rock or cobble) or that incorporates a design theme (e.g., wildlife and plants of local, native oak woodlands; traditional architectural elements such as inset panels; or other design reflecting local heritage or environment) using form liners. This will reduce visual monotony, soften verticality, reduce glare, and be more visually pleasing to viewers than plain surfaces for exterior facing barriers and girders on bridges that will be visible to traffic or recreational viewers passing under the overcrossing, decking, abutments and side supports, and columns. Nearby examples of such 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; US 54/East Kellogg Drive and South Oliver Street interchange in Wichita, Kansas; and Roberts Road Bridge in Los Gatos, California. Roughened surfaces would soften the verticality of the surfaces by providing visual texture and reducing the amount of smooth surface that can reflect light. Designing the Merced Layover & Maintenance Facility to recede into views would reduce the overall apparent scale of the facility so that it blends better in views.



**Mitigation Measure AES-2.3: Underground new utilities**

Where feasible, SJRRC will underground new utilities to minimize their visual intrusion upon the landscape. Undergrounding new utilities will not be used where implementation would constitute an adverse impact on sensitive habitats or sensitive species that would outweigh the reduction of visual effects. In such cases, the Project engineer will identify site-specific location adjustments to avoid mature trees and to 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 would result from removal and pruning of mature vegetation along proposed new transmission lines. This measure will reduce the number of trees and shrubs that will be removed because of the installation of transmission lines and development of access roads.

**Mitigation Measure AES-2.4: Apply aesthetic surface treatments to fencing and pedestrian bridge safety barriers**

New fencing and pedestrian bridge safety barriers will be colored or painted a shade that is two to three shades darker than the general surrounding area. Colors will be chosen from the U.S. Department of the Interior, Bureau of Land Management Standard Environmental Colors Chart CC-001: June 2008. Because color selection will vary by location, the facility designer will employ the use of color panels evaluated from key observation points during common lighting conditions (front light versus backlighting) to aid in the appropriate color selection. Color selection will be made for the coloring of the most prevalent season. Panels will be a minimum of 3 feet by 2 feet in dimension and will be evaluated from various distances within 1,000 feet to ensure the best possible color selection.

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

**Mitigation Measure AES-2.5: Replace disturbed vegetation along landscaped freeways**

SJRRC or its contractor(s) will work with the appropriate Caltrans district landscape architect to determine if disturbed portions of landscaped freeways 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 groundcovers will be replanted to match existing groundcovers unless the Caltrans district landscape architect specifies otherwise. Irrigation of replacement plants will also be coordinated with the appropriate Caltrans district landscape architect as watering may occur with existing irrigation systems or irrigation may need to be installed. Any irrigation lines that are damaged within the state ROW as a result of construction will also be replaced per Caltrans standards and in coordination with the appropriate Caltrans district landscape architect. No invasive plant species will be planted under any circumstances.

## Significance with Application of Mitigation

Mitigation Measure AES-2.1 would reduce impacts associated with vegetation removal and the appearance of paved lots for the Proposed Project by ensuring that parking facilities and streets are landscaped and blend with the surrounding environment. Mitigation Measure AES-2.2 would apply aesthetic design treatments to the pedestrian bridge for the Turlock Station and buildings associated with the Merced Layover & Maintenance Facility to ensure that visual conditions are improved. Mitigation Measure AES-2.3 would ensure that new overhead utilities are placed underground for new stations and would reduce visual impacts related to new overhead utilities. Mitigation Measure AES-2.4 would apply aesthetic surface treatments to fencing and pedestrian bridge safety barriers associated with the Proposed Project and would ensure that fencing and safety barriers blend with the surrounding environment. Mitigation Measure AES-2.5 would replace any vegetation damaged by the Ceres to Merced Extension Alignment along the Caltrans-designated landscaped freeway segment of SR 99. Implementation of Mitigation Measures AES-2.1 through AES-2.5 would minimize impacts of the Proposed Project on the scenic quality of urbanized areas and conflicts with applicable zoning and regulations to a less than significant level.

For the same reasons as the Proposed Project, implementation of Mitigation Measures AES-2.1, AES-2.3, and AES-2.4 would minimize impacts of the Atwater Station Alternative on the scenic quality of urbanized areas and conflicts with applicable zoning and regulations to a less than significant level.

## Comparison of the Proposed Livingston Station and the Atwater Station Alternative

Construction of the Atwater Station Alternative would occur in an area where there is a higher concentration of sensitive viewers compared to the proposed Livingston Station. Residential viewers could have operational activities occurring adjacent to their homes, or nearby, which may evoke a negative response due to the proposed visual changes. Nonetheless, the Atwater Station Alternative and the proposed Livingston Station would both result in a less than significant impact after mitigation.

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<b>Impact AES-3</b>	Proposed Project operations would not substantially degrade the existing visual character or quality of public views the site and its surroundings in a non-urbanized area, including scenic vistas.
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<b>Level of Impact</b>	<b>Less than significant impact</b> <u>Proposed Project</u> Ceres to Merced Extension Alignment (in non-urbanized areas)
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	<b>No impact</b> <u>Proposed Project</u> Ceres to Merced Extension Alignment (in urbanized areas) Merced Layover & Maintenance Facility Turlock Station Livingston Station Merced Station
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	<u>Alternative Analyzed at an Equal Level of Detail</u> Atwater Station Alternative
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## Impact Characterization and Significance Conclusion

### Proposed Project

Portions of the Proposed Project would be located within urbanized areas of Ceres, Keyes, Turlock, Delhi, Livingston, Atwater, Fergus, and Merced. Thus, these portions of the Ceres to Merced Extension Alignment, the proposed stations (Turlock Station, Livingston Station, and Merced Station), and the Merced Layover & Maintenance Facility would have no visual impact on non-urbanized areas. There are no stations proposed in non-urbanized areas. However, much of the Proposed Project (Ceres to Merced Extension Alignment) falls within non-urbanized areas.

As identified in Table 3.1-1, there are several Caltrans-designated landscaped freeways within view of the Proposed Project. Appendix H, *Supporting Aesthetics Information*, includes a preliminary screening of landscaped freeways within 3 miles of the environmental footprint to determine the components requiring further analysis. As identified in this table, there are no segments of the Ceres to Merced Extension Alignment that would affect landscaped freeways in non-urbanized areas.

Visual changes resulting from operation of the Proposed Project within non-urbanized areas would affect residential viewers, roadway travelers, and recreationists adjacent to the Proposed Project. The intensity of the impact would vary depending on number of viewers present, proximity of viewers to the alternative, degree of physical change in the landscape, visibility of the physical change and alternative, volume of train traffic, and required maintenance.

The Ceres to Merced Extension Alignment would be adjacent to rural residential and rural commercial uses that border the tracks in non-urbanized areas. SR 99 is a prominent transportation corridor that parallels the existing tracks for much of the length. Local roadways, aboveground utility infrastructure (utility poles with lines), and fencing contribute to the cultural environment. Rural development along the rail corridor is common to the valley cultural landscape. The Ceres to Merced Extension Alignment would be mostly at-grade (except for waterbody crossings) within the UPRR ROW adjacent to SR 99. Thus, the tracks themselves would be consistent with and would not adversely change the existing visual character of the UPRR ROW and would not change the visual character of adjacent areas.

The Ceres to Merced Extension Alignment would require modification of a number of at-grade crossings, existing overhead structures, and installation of new single-track bridge structures over waterbodies. Because the new track would be at the same grade as the existing track, the top elevation of modified overhead structures would not be higher than existing overhead structures. New bridges would also be constructed for the Ceres to Merced Extension Alignment, including bridges in non-urbanized areas over the Merced River, Canal Creek, Weber Canal, and Irrigation Canal. The existing bridges lack aesthetic design treatments and have a substantial amount of graffiti. The new bridges would be visually similar to the adjacent and existing single-track bridge, located mostly in between SR 99 and frontage roads, and would not negatively affect the current aesthetics at the site.

Relocated railroad signals, safety gates, and power poles would not affect visual resources or the existing visual quality in non-urbanized areas, because these are existing visual elements that would be shifted slightly in the landscape. Relocating railroad crossing and stop bar pavement markings would shift existing pavement markings and would not affect visual resources or visual quality in non-urbanized areas. Installing concrete crossing panels adjacent to existing concrete crossing panels in the roadway surface would be consistent with the existing roadway conditions and would

not alter visual resources or affect visual quality in non-urbanized areas. No signal houses are proposed to be built or relocated in non-urbanized areas.

The Proposed Project would require routine vegetation maintenance in the UPRR ROW, along the environmental footprint. Viewers may see vegetation-clearing activities. Because farming, rail, and road maintenance are prevalent in the AVE, these activities and equipment within the UPRR ROW would not likely constitute a visual impact.

Overall, operations of the Proposed Project (due to Ceres to Merced Extension Alignment) would result in visual changes that would have little effect on adjacent rural residential viewers, roadway travelers, and recreationists. These visual changes would be in keeping with the existing visual landscape and would be a less-than-significant impact.

### **Atwater Station Alternative**

The Atwater Station Alternative would be located within the urbanized area of Atwater. Thus, the Atwater Station Alternative would have no visual impact on non-urbanized areas. There would be no difference in impacts between the Atwater Station Alternative and the proposed Livingston Station (both would result in no impact).

<b>Impact AES-4</b>	Proposed Project operations could substantially damage scenic resources within a state scenic highway.
<b>Level of Impact</b>	<p><b>Potentially significant impact</b>  <u>Alternative Analyzed at an Equal Level of Detail</u>            Atwater Station Alternative</p> <p><b>Less than significant impact</b>  <u>Proposed Project</u>            Ceres to Merced Extension Alignment in Atwater</p> <p><b>No impact</b>  <u>Proposed Project</u>            Ceres to Merced Extension Alignment outside of Atwater            Merced Layover &amp; Maintenance Facility            Turlock Station            Livingston Station            Merced Station</p>
<b>Mitigation Measures</b>	AES-2.1: Landscape parking facilities AES-2.3: Underground new utilities AES-2.4: Apply aesthetic surface treatments to fencing and pedestrian bridge safety barriers
<b>Level of Impact after Mitigation</b>	<b>Less than significant impact</b>

### **Impact Characterization and Significance Conclusion**

There are no officially designated and eligible State Scenic Highways within 3 miles of the environmental footprint. In addition to State Scenic Highways, county- and city-designated scenic roadways are considered in this analysis. There are no county-designated scenic roadways within view of the Proposed Project; however, there are city-designated scenic roadways in the cities of

Atwater and Merced. Appendix H, *Supporting Aesthetics Information*, lists the city-designated scenic routes within 3 miles of the Proposed Project and identifies the routes that have been screened for analysis.

#### **Proposed Project**

##### ***Ceres to Merced Extension Alignment (in Merced), Merced Layover & Maintenance Facility, Turlock Station, Livingston Station, and Merced Station***

As identified in Appendix H, *Supporting Aesthetics Information*, city-designated scenic routes are only located in Atwater and Merced. As indicated by the screening analysis, the Ceres to Merced Extension Alignment, Merced Layover & Maintenance Facility, and Merced Station are located away from and would not have views of city-designated scenic routes within Merced; therefore, these proposed facilities would have no impact on scenic routes in Merced. The Turlock Station and Livingston Station are not located in Atwater or Merced and would, therefore, have no impact on scenic routes.

##### ***Ceres to Merced Extension Alignment (in Atwater)***

As identified in Appendix H, *Supporting Aesthetics Information*, the Ceres to Merced Extension Alignment in Atwater would cross, parallel, or pass near and would be visible from the following city-designated scenic roadways: Atwater Boulevard, First Street, Shaffer Road, Winton Way, Broadway from Winton Way to First Street, Buhach Road, Third Street, and entrances to the city of Atwater. As described under Impact AES-2, the Ceres to Merced Extension Alignment in Atwater would all be built along existing rail segments, alongside an existing rail corridor that passes through a flat, urbanized landscape. This would be a minor visual expansion of existing conditions and would generally not alter the existing visual landscape or affect the existing visual quality associated with associated scenic roadways in Atwater. The impacts on scenic highways from the Ceres to Merced Extension Alignment in Atwater would be less than significant.

Overall, the impact on scenic highways from the Proposed Project would be less than significant.

#### **Atwater Station Alternative**

As identified in Appendix H, *Supporting Aesthetics Information*, the Atwater Station Alternative would be visible from the following city-designated scenic roadways: Atwater Boulevard, First Street, Winton Way, Broadway from Winton Way to First Street, Third Street, and entrances to the City in Atwater near the station. The Atwater Station Alternative would all be built along the existing rail segment, on parcels that are currently developed with commercial uses and the Atwater Transpo bus station. As shown in the “After Project” view of KOP 5 in Figure 3.1-6, the existing structures would be removed to construct the parking facilities and station platform for the station and would remove disjointed commercial uses and ensure that the site does not become blighted as the abandoned uses would deteriorate over time. As seen in the simulation, station platforms would not be a prominent visual feature associated with the station, and landscaping would replace removed trees and increase the natural harmony of the area. This would create a view that is more visually cohesive compared to existing conditions and that integrates the rail corridor to the surrounding landscape. The station would also require fence installation for safety. If fencing is light gray, the color would act to limit views. Coloring the barrier in a dark color improves visibility through the barrier compared with a standard gray metal surface. The visual quality of KOP 5 would remain *moderate* (refer to Simulation Rating Forms in Appendix H). However, other views

associated with the station could be affected if structures at the station and ancillary station features (e.g., fencing, railings) do not blend in views and may affect views from the scenic routes. Therefore, impacts on scenic highways from the Atwater Station Alternative would be potentially significant.

## **Mitigation Measures**

Mitigation Measure AES-2.1 would apply to the Atwater Station Alternative to minimize impacts associated with vegetation removal and to improve visual quality associated with the facilities. Mitigation Measure AES-2.3 would apply to the Atwater Station Alternative to reduce visual impacts related to new overhead utilities. Mitigation Measure AES-2.4 would apply to the Atwater Station Alternative to ensure that fencing is designed to be complementary to surrounding environments.

### **Mitigation Measure AES-2.1: Landscape parking facilities and the Merced Layover & Maintenance Facility**

Refer to measure description under Impact AES-2.

### **Mitigation Measure AES-2.3: Underground new utilities**

Refer to measure description under Impact AES-2.

### **Mitigation Measure AES-2.4: Apply aesthetic surface treatments to fencing and pedestrian bridge safety barriers**

Refer to measure description under Impact AES-2.

## **Significance with Application of Mitigation**

Implementation of Mitigation Measure AES-2.1 would reduce impacts associated with vegetation removal and the appearance of paved lots for the Atwater Station Alternative by ensuring that parking facilities and streets are landscaped, blend with the surrounding environment, and improve views from scenic routes. Implementation of Mitigation Measure AES-2.3 would ensure that new overhead utilities are placed underground for the Atwater Station Alternative and would reduce visual impacts related to new overhead utilities. Implementation of Mitigation Measure AES-2.4 would apply aesthetic surface treatments to fencing and pedestrian bridge safety barriers associated with Atwater Station Alternative and would reduce impacts by ensuring that fencing and safety barriers blend with the surrounding environment. Implementation of Mitigation Measures AES-2.1, AES-2.3, and AES-2.4 would minimize impacts of the Atwater Station Alternative on scenic routes to a less than significant level.

## **Comparison of the Proposed Livingston Station and Atwater Station Alternative**

The proposed Livingston Station is not located near any scenic routes. Therefore, the Atwater Station Alternative is the station most likely to impact scenic routes. The Atwater Station Alternative is expected to result in a less than significant impact after mitigation on scenic routes, compared to the proposed Livingston Station, which would have no impact on scenic routes.

<b>Impact AES-5</b>	Proposed Project operations could create a new source of substantial light or glare that would adversely affect day or nighttime views.
<b>Level of Impact</b>	<p><b>Potentially significant impact</b></p> <p><u>Proposed Project</u></p> <p>Merced Layover &amp; Maintenance Facility</p> <p>Turlock Station</p> <p>Livingston Station</p> <p>Merced Station</p> <p><u>Alternative Analyzed at an Equal Level of Detail</u></p> <p>Atwater Station Alternative</p> <p><b>Less than significant impact</b></p> <p><u>Proposed Project</u></p> <p>Ceres to Merced Extension Alignment</p>
<b>Mitigation Measures</b>	<p>AES-2.1: Landscape parking facilities</p> <p>AES-2.2: Apply aesthetic design treatments to pedestrian bridges over tracks and bridges with visibility to residents and recreationists</p> <p>AES-5.1: Apply minimum lighting standards</p>
<b>Level of Impact after Mitigation</b>	<b>Less than significant impact</b>

## Impact Characterization

### Proposed Project

#### *Ceres to Merced Extension Alignment*

No nighttime lighting is proposed along the Ceres to Merced Extension Alignment. Incremental increases in glare would occur along areas where trees and shrubs are removed to accommodate construction of the Ceres to Merced Extension Alignment. However, these changes would not substantially increase glare because vegetation outside the UPRR ROW would remain to shade the corridor. The new bridge structures would create new surfaces to reflect light. The new bridge structures would be made of steel and concrete, which would not substantially increase glare due to the nature of the material. The bridges would remain visible, but they would also create a source of shade over waterways (e.g., Merced River), which would result in a slight reduction in glare coming from the waterway's surface. Safety lighting at at-grade crossings would only be used when trains are passing and would not result in a notable increase in lighting in the area during the short activation time. The Ceres to Merced Extension Alignment would introduce a small source of light from the train headlights when traveling at night. Train headlights are a pre-existing condition along the existing tracks and train headlights from the Proposed Project would constitute a nominal increase in passing trains and would not increase light in any one location for more than a few moments as the trains pass. In addition, the trains would move through the AVE 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 resulting from the Ceres to Merced Extension Alignment would be less than significant.

**Merced Layover & Maintenance Facility**

Nighttime lighting could occur at the Merced Layover & Maintenance Facility and could include standard lighting or LED lighting for security purposes that could affect sensitive receptors if not properly designed. Such lighting could result in significant impacts if the lighting spilled outside the site boundaries, creating a new source of nuisance lighting or glare for adjacent sensitive viewers. LED lights 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 lamps (BRWL) are used (American Medical Association 2016; International Dark-Sky Association 2010a, 2010b, 2015). Studies have found that a 4000 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). Therefore, the use of BRWL LED lighting would amplify impacts and result in a substantial source of nighttime light and glare that could negatively impact nighttime views in the area. Such lighting could spill outside the site boundaries, creating a new source of nuisance lighting or glare for adjacent sensitive viewers. Lighting associated with the Merced Layover & Maintenance Facility, including from access roads and outdoor standard lighting would result in potentially significant increases in nighttime lighting if not properly designed, creating light spill and a new source of nuisance lighting and glare for adjacent sensitive viewers. BRWL LED lighting would amplify impacts and result in potentially significant impacts.

**Turlock Station, Livingston Station, and Merced Station**

The Turlock Station, Livingston Station, and Merced Station would include new station platforms and new parking areas where none presently exist. As shown on simulations for KOPs 2 through 4, Figures 3.1-3 through 3.1-5, new lights would be installed to light the stations and associated facilities. None of these stations would include new station terminals or buildings; therefore, there would be no new interior building lighting associated with the stations. Parking lot, access road, platform, and pedestrian overcrossing lighting could include standard lighting or LED lighting for security purposes that could affect sensitive receptors if not properly designed. As described above for the Merced Layover & Maintenance Facility, BRWL LED lighting can negatively affect humans by increasing nuisance light and glare, in addition to increasing ambient light glow and more than doubling the perceived brightness of the night sky, if proper shielding is not provided. Therefore, the use of BRWL LED lighting would amplify impacts and result in a substantial source of nighttime light and glare that could negatively impact nighttime views in the area. This would result in light and glare impacts that would be potentially significant.

**Atwater Station Alternative**

Similar to the Livingston Station, the Atwater Station Alternative would include new station platforms and new parking areas where none presently exist. As shown on the simulation for KOP 5, Figure 3.1-6, new lights would be installed to light the station and associated facilities. A new station terminal or building would not be constructed; therefore, there would be no new interior building lighting associated with the station. Parking lot, access road, and platform lighting could include standard lighting or LED lighting for security purposes that could affect sensitive receptors if not properly designed. As described above for the Merced Layover & Maintenance Facility, BRWL LED lighting can negatively affect humans by increasing nuisance light and glare, in addition to increasing ambient light glow and more than doubling the perceived brightness of the night sky, if proper shielding is not provided. Therefore, the use of BRWL LED lighting would amplify impacts



and result in a substantial source of nighttime light and glare that could negatively impact nighttime views in the area. This would result in light and glare impacts that would be potentially significant.

### **Mitigation Measures**

Mitigation Measure AES-2.1 would apply to the Turlock Station, Livingston Station, Merced Station, Merced Layover & Maintenance Facility, and Atwater Station Alternative to minimize light and glare impacts associated with vegetation removal and to provide new sources of light screening and shade. Mitigation Measure AES-2.2 would apply to the Turlock Station to ensure that bridges are designed to be complementary to surrounding environments and would not result in light and glare impacts. Mitigation Measure AES-5.1 would apply to the Turlock Station, Livingston Station, Merced Station, Merced Layover & Maintenance Facility, and Atwater Station Alternative to ensure that changes to nighttime light and glare would be nominal compared to existing conditions with these facilities.

#### **Mitigation Measure AES-2.1: Landscape parking facilities and the Merced Layover & Maintenance Facility**

Refer to measure description under Impact AES-2.

#### **Mitigation Measure AES-2.2: Apply aesthetic design treatments to pedestrian bridges over tracks and bridges with visibility to residents and recreationists**

Refer to measure description under Impact AES-2.

#### **Mitigation Measure AES-5.1: Apply minimum lighting standards**

All artificial outdoor lighting will be limited to safety and security requirements, designed using Illuminating Engineering Society's design guidelines and in compliance with International Dark-Sky Association approved fixtures. All lighting is designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that direct the light only towards objects requiring illumination. Shielding will be utilized, where needed, to ensure light pollution is minimized. Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties, open spaces, or backscatter into the nighttime sky. The lowest allowable 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 and have daylight sensors or be timed with an on/off program. Lights will provide good color rendering with natural light qualities with the minimum intensity feasible for security, safety, and personnel access. 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 and use a correlated color temperature that is no higher than 3,000 Kelvin (International Dark-Sky Association 2010a, 2010b, 2015). Wherever possible and pragmatic, SJRRC or its contractor(s) will use fixtures and lighting control systems that conform to the International Dark-Sky Association's Fixture Seal of Approval program. In addition, LED lights will use shielding to ensure 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 offsite light spill, ambient light glow, and glare and be screened and directed away from residences and adjacent uses to the highest degree possible. The number of nighttime lights used will be minimized 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 the amount of ornamental light posts to higher-use areas and by using bollard lighting on travel way portions of pathways.

Technologies to reduce light pollution evolve over time and design measures that are currently available may help but may not be the most effective means of controlling light pollution once the Project is designed. Therefore, all design measures used to reduce light pollution 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**

Mitigation Measure AES-5.1 would ensure that the change to existing nighttime light and glare levels relative to parking lots, access roads, and platform lighting at the Turlock Station, Livingston Station, and Merced Station are nominal. Mitigation Measure AES-5.1 would also ensure that the change to existing nighttime light and glare levels relative to lighting at the Merced Layover & Maintenance Facility are nominal. Implementation of Mitigation Measure AES-2.1 would ensure that trees are planted to provide a source of shade to reduce glare and to filter nighttime lighting and reduce impacts from the Turlock Station, Livingston Station, Merced Layover & Maintenance Facility, and Merced Station. Implementation of Mitigation Measure AES-2.2 would ensure that aesthetic treatments are applied to the visible pedestrian bridge structure and building facades and would decrease glare and reduce impacts from the Turlock Station and the Merced Layover & Maintenance Facility. Implementation of Mitigation Measures AES-2.1, AES-2.2, and AES-5.1 would minimize impacts from light and glare to a less than significant level.

For the same reasons as the Proposed Project, implementation of Mitigation Measures AES-2.1 and AES-5.1 would minimize impacts of the Atwater Station Alternative from light and glare to a less than significant level.

### **Comparison of the Proposed Livingston Station and Atwater Station Alternative**

Construction of the Atwater Station Alternative would result in the same light and glare impacts as described for the proposed Livingston Station. However, the Atwater Station Alternative would be located in an area where there is a higher concentration of sensitive viewers. Residential viewers would be exposed to nuisance light and glare spill emanating from station and parking lot lighting, which could result in a substantial increase in nighttime light and glare. Nonetheless, both the proposed Livingston Station and the Atwater Station would result in a less than significant impact after implementation of mitigation.

### 3.1.5.3 Overall Comparison of the Proposed Livingston Station and Atwater Station Alternative

Because the Atwater Station Alternative would occur in an area with a higher concentration of sensitive viewers than the proposed Livingston Station, the Atwater Station Alternative would have a slightly greater impact on aesthetics, including temporary construction impacts, permanent impacts on scenic quality due to implementation of the Project, and light and glare impacts. In addition, because the Atwater Station Alternative would be located near city-designated scenic roadways and the proposed Livingston Station would not be located near any scenic roadways, the Atwater Station Alternative would have a slightly greater impact on aesthetics due to impacts on scenic resources.

Overall, both the Atwater Station Alternative and the proposed Livingston Station would have a moderate negative impact<sup>3</sup> on aesthetics resources; however, the Atwater Station Alternative would have a slightly greater impact on aesthetic resources compared to the proposed Livingston Station.

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<sup>3</sup> The comparison between the Atwater Station Alternative and the proposed Livingston Station is summarized in Table 5-2 in Chapter 5, *Alternatives*. Aesthetics impacts are compared using a scale. Both the Atwater Station Alternative and the proposed Livingston Station were identified to have a Scale 4 impact (moderate negative impact).