

## 5. Environmental Setting and Environmental Impacts

### 5.1 Aesthetics

AESTHETICS				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### 5.1.1 Setting

Aesthetics, as addressed in the California Environmental Quality Act (CEQA), refers to visual considerations in the physical environment. Aesthetics analysis, or visual resource analysis, is a systematic process to logically assess visible change in the physical environment and the anticipated viewer response to that change. The Aesthetics section of this IS/MND describes the existing landscape character of the project area, existing views of the project area from various on-the-ground vantage points, the visual characteristics of the proposed SCE Banducci Substation Project (Proposed Project), and the landscape changes that would be associated with the construction and operation of the Proposed Project as seen from various vantage points.

##### **Visual Sensitivity–Visual Change Methodology**

Under this methodology, the Proposed Project was viewed from various public roads and vantage points to develop an overall assessment of the existing landscape character, visual quality, and viewing conditions. Then, at representative viewpoints (Key Observation Points, or KOPs), the existing landscape was characterized (for visual quality, viewer concern, and viewer exposure) and photographed. Each of the factors considered in the evaluation of the existing landscape under the Visual Sensitivity–Visual Change methodology is discussed below.

**Visual Quality** is a measure of the overall impression or appeal of an area as determined by particular landscape characteristics such as landforms, rockforms, water features, and vegetation patterns, as well as associated public values. The attributes of variety, vividness, coherence, uniqueness, harmony, and pattern contribute to visual quality classifications of indistinctive (Low), common (Moderate), and distinctive (High). Visual quality is studied as a point of reference to assess whether a given project would appear compatible with the established features of the setting or would contrast noticeably and unfavorably with them.

**Viewer Concern** addresses the level of interest or concern of viewers regarding an area’s visual resources (rated from Low to High) and is closely associated with viewers’ expectations for the area. Viewer concern reflects the importance placed on a given landscape based on the human perceptions of the intrinsic beauty of the existing landforms, rockforms, water features, vegetation patterns, and even cultural features.

**Viewer Exposure** describes the degree to which viewers are exposed to views of the landscape (rated Low to High). Viewer exposure considers landscape visibility (the ability to see the landscape), distance zones (proximity of viewers to the subject landscape), number of viewers (Low to High), and the duration of view (Brief to Extended). Landscape visibility can be a function of several interconnected considerations including proximity to viewing point, degree of discernible detail, seasonal variations (snow, fog, and haze can obscure landscapes), time of day, and/or presence or absence of screening features such as landforms, vegetation, and/or built structures. Even though a landscape may have highly scenic qualities, it may be remote, receiving relatively few visitors and thus, have a lower degree of viewer exposure. Conversely, a subject landscape or project may be situated in relatively close proximity to a major road or highway used by a substantial number of motorists and yet still result in relatively low viewer exposure if the rate of travel speed on the roadway is high and viewing times are brief, or if the landscape is partially screened by vegetation or other features. Often, it is the subject area's proximity to viewers, or distance zone, that is of particular importance in determining viewer exposure. Landscapes are generally subdivided into three or four distance zones based on relative visibility from travel routes or observation points. Distance zones typically include foreground, middleground, and background. The actual number of zones and distance assigned to each zone is dependent on the existing terrain characteristics and public policy and often is determined on a project-by-project basis.

**Overall Visual Sensitivity** is a concluding assessment as to an existing landscape's susceptibility to an adverse visual outcome (rated Low to High). A landscape with a high degree of visual sensitivity is able to accommodate only a low degree of adverse visual change without resulting in a significant visual impact. A landscape with a low degree of visual sensitivity is able to accommodate a higher degree of adverse visual change before exhibiting a significant visual impact. Overall visual sensitivity is derived from a comparison of existing visual quality, viewer concern, and viewer exposure.

### **Existing Landscape Setting and Viewer Characteristics**

This section discusses: (1) the existing visual character of the region; (2) the existing visual quality of the Proposed Project area; (3) viewer concern; and (4) viewer exposure to the Proposed Project, leading to a rating of overall visual sensitivity. Also discussed are the existing sources of light and glare within the Proposed Project area.

**Regional Context.** The Proposed Project area is within the Greater Tehachapi Area (GTA) in unincorporated Kern County, California. The GTA is a distinctive Specific and Community Plan area in the county with a topographical and natural diversity encompassing numerous and varied scenic and natural resources. These scenic and natural resources include vistas of mountains, valleys, lakes, agriculture, ranching, historical buildings, and oak woodlands. The Tehachapi Mountains and southern Sierra Nevada surround four main valleys: Tehachapi, Cummings, Bear, and Brite valleys. Notable peaks in the Tehachapi Mountains include Tehachapi, Double Mountain, Bear Mountain, Cummings Mountain, Black Mountain, and Sweet Ridge. Scenic resources also include various types of chaparral, woodland, and forest vegetation communities, as well as recreational areas (Kern County Planning and Community Development Department, 2010). The Proposed Project would occur in Cummings Valley and other portions of the GTA, as well as portions of the incorporated City of Tehachapi (City), which is not a part of the GTA even though it is within the GTA boundaries.

The GTA largely consists of sparsely populated rural and semirural communities. Cummings Valley is predominantly agricultural with agriculture-related facilities and rural residences. The City is a small community containing both rural and urban areas with a mix of residential, industrial, commercial, and agricultural land uses. The proposed Banducci Substation site is located within Cummings Valley, and the

two proposed fiber optic communications routes follow existing utility routes from the proposed substation site to the east through the City and then farther to the east to the existing Monolith Substation (Figures 5.1-1A and 5.1-1B).

The proposed substation site is situated within the relatively flat, circular-shaped Cummings Valley floor at an elevation of approximately 3,800 feet above mean sea level (amsl). Cummings Valley is surrounded on all sides by hills and low-lying mountain ranges with an average elevation of 4,000 to 4,400 feet amsl. The proposed substation site was used in the past for agricultural purposes. Land uses immediately surrounding the site are predominantly designated as agricultural land. A State prison, the California Correctional Institution, is located in an annexed portion of the City, east of the proposed substation site (Figure 5.1-1A and 5.1-1B).

Fiber optic communications Route 1 would connect the proposed Banducci Substation to the existing Monolith Substation to the east of the City by way of the existing Cummings Substation (Figure 5.1-1A). The route travels in a nearly direct west-east direction and is approximately 14.5 miles long. The fiber optic cable would be underground from the proposed Banducci Substation and would transition to an overhead position on existing wood poles on Highline Road for six miles until it transitions underground again before entering Cummings Substation. This portion of the route passes through agricultural, institutional (California Correctional Institution), recreational (Brite Lake Aquatic Recreation Area), and rural residential land uses and mostly travels along dirt roads. After exiting Cummings Substation, the cable again would transition to an overhead position on existing wood poles and continue overhead for 7.5 miles to an existing pole outside the existing Monolith Substation where it would once again transition underground to enter the substation (Figure 5.1-1A). This portion of the route passes through largely agricultural and rural residential land uses and travels almost exclusively along paved roadways.

Fiber optic communications Route 2 would directly connect the proposed Banducci Substation to the existing Monolith Substation east of the City (Figure 5.1-1A). This route travels in a west-east direction but meanders north and south primarily along paved roadways or railroad tracks. The fiber optic cable would be underground from the proposed Banducci Substation and would transition to an overhead position on a new wood pole on Pelliser Road (an existing wood-pole line is already present along Pelliser Road). From this position, it would travel mostly overhead on existing wood poles but would be undergrounded at times. The total approximate length of this route is 17.5 miles. In the west, the route passes through the agricultural lands of Cummings Valley and along the base of the foothills defining the northern boundary of the valley. As it continues eastward, it passes through commercial, undeveloped grassland and shrubland, rural residential, suburban residential, and urban land uses. From downtown Tehachapi, the route traverses through agricultural and undeveloped land east to the existing Monolith Substation.

***Project Viewshed, Regional Viewpoints, and Key Observation Points.*** The project viewshed is defined as the areas and locations from which the Proposed Project would be seen. The viewshed includes portions of Cummings Valley and the immediately surrounding foothills (for the proposed substation and both fiber optic communications routes) and portions of the City, as well as areas east and west of the City (both fiber optic communications routes). Many of the residences up to 1.5 miles from the proposed substation site would have at least some view of the proposed Banducci Substation (Figures 5.1-1A and 5.1-1B).

Three Regional Viewpoints that encompass both the proposed Banducci Substation site and the fiber optic communications routes were identified for landscape visibility discussion (Figure 5.1-1A). Six KOPs were selected for the Proponent's Environmental Assessment (PEA) to illustrate the existing visual setting and visual change that would be associated primarily with the proposed Banducci Substation (Figures

5.1-1A and 5.1-1B). The addition of the Route 1 and Route 2 fiber optic communications cables to existing wood-pole lines would not be noticeable to the casual viewer; therefore, the Regional Viewpoint and KOP discussions below focus primarily on the proposed Banducci Substation.

It should be noted that the first figure for each KOP (i.e., Figures 5.1-5A, 5.1-6A, etc.) presents a life-size scale image when the image is held 18 inches from the eye. That is, all of the landscape features appear the same size as they would if directly observed in the field. The second figure for each KOP (i.e., Figure 5.1-5B, 5.1-6B, etc.) presents reduced-sized images from the PEA. Reducing images creates the impression that Proposed Project components are smaller or farther away than they really would be.

### ***Regional Viewpoint 1 – West Valley Boulevard***

Regional Viewpoint 1 presents the existing view along State Route (SR) 202 overlooking Cummings Valley to the southwest (Figure 5.1-2). This view would be representative of those from the rural residences from one to 1.5 miles from the proposed substation site, particularly those in Stallion Springs (Figure 5.1-1B). However, views from Stallion Springs would be primarily limited to the residences along the northern and eastern perimeters of the residential development. This panoramic view captures the rural character of the flat-bottomed valley with its agricultural facilities, ranch and farm lands, rural residences, and existing utility infrastructure. The surrounding foothills that define the valley are visible in the background at a distance of approximately six miles. The utility line along the north (right) side of the road represents a portion of the fiber optic communications Route 2.

### ***Regional Viewpoint 2 – Ronnie Avenue***

Regional Viewpoint 2 presents the existing view of Cummings Valley to the north from Ronnie Avenue, a rural residential access road in the southern portion of the valley (Figure 5.1-3). This panoramic view captures much of the valley's rural character. Numerous existing utility poles are visible in the open landscape. The proposed Banducci Substation would be located in the open field just beyond and slightly to the left of the grouping of trees just above the corrugated, round-roofed structure in the center of the image. The distance to the proposed substation site from Regional Viewpoint 2 is approximately 0.85 miles.

### ***Regional Viewpoint 3 – Highline Road***

Regional Viewpoint 3 presents the existing view to the east on Highline Road, east of Brite Lake, west of Cummings Substation, and southwest of downtown Tehachapi (Figure 5.1-4). The view transects the rural ranching country north of the Tehachapi foothills. The utility line along the north (left) side of the road represents a portion of the fiber optic communications Route 1.

### ***KOP 1 – Pelliser Road Viewing South***

Figure 5.1-5A presents a life-size scale view of the proposed substation site from KOP 1, approximately 0.5 miles north of the site looking south toward the site from southbound Pelliser Road. The view captures a central portion of the rural Cummings Valley back-dropped by the Tehachapi Mountains. The substation would be located in an open field adjacent to, and to the east of (to the left of), Pelliser Road. The existing utility line along the east (left) side of the road represents a portion of the fiber optic communications Route 2. Figure 5.1-5B presents reduced images of the existing view and a simulation of the view with the proposed Banducci Substation. The presence of snow in the image provides a backdrop that causes the substation components to blend into the background more than they would during non-snow conditions that are more typical of the area.

*Visual Quality.* Moderate. The landscape is predominantly rural in character, and much of it consists of cultivated row crops. Utility infrastructure with prominent vertical forms and lines are present along Pelliser Road and other roads throughout Cummings Valley. Agricultural facilities also punctuate the flat valley floor along with scattered rural residences. Numerous rural residences are located along the base of the foothills defining the southern extent of the valley. The surrounding foothills of the Tehachapi Mountains are more natural in appearance and provide a backdrop of visual interest in contrast to the flat valley floor.

*Viewer Concern.* Moderate to High. Utility infrastructure is noticeable in the foreground to middle-ground views from Pelliser Road, and travelers on Pelliser Road anticipate the prominent presence of the existing utility infrastructure. However, the same travelers would perceive a substantial increase in industrial character, structure prominence, or view blockage of the higher value landscape features (e.g., the valley floor and foothills) from the proposed Banducci Substation as an adverse visual change, particularly if it diminishes the overall rural character of the valley.

*Viewer Exposure.* Moderate to High. The proposed Banducci Substation would be highly visible in the foreground views of travelers on Pelliser Road. The number of viewers would be moderate; the average daily traffic on Pelliser Road is 1,700 vehicle trips per day (Southern California Edison [SCE; Proponent or Applicant] 2012). The duration of view would be moderate due to the prominence of the substation components (the tallest being up to approximately 75 feet high) within an approximately 3.3-acre walled-in facility. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

*Overall Visual Sensitivity.* Moderate to High. For viewers in the vicinity of KOP 1, combining the equally weighted Moderate visual quality, Moderate to High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

### ***KOP 2 – Dale Road***

Figure 5.1-6A presents a life-size scale view of the proposed substation site from KOP 2, approximately 0.22 miles west of the site looking east toward the site from Dale Road. The view captures a portion of the predominantly rural, agricultural landscape that comprises much of Cummings Valley. The foothills of the Tehachapi Mountains provide a backdrop to the flat valley floor. The proposed substation would be located in the open field just beyond the green, planted field. Figure 5.1-6B presents reduced images of the existing view and a simulation of the view with the Proposed Banducci Substation.

*Visual Quality.* Moderate. The landscape is predominantly rural in character, and much of it consists of cultivated row crops. Existing utility infrastructure with prominent vertical forms and lines are present along Dale Road and Pelliser Road. Agricultural facilities and rural residences punctuate the flat valley floor. The surrounding foothills of the Tehachapi Mountains are more natural in appearance and provide a backdrop of visual interest in contrast to the flat valley floor.

*Viewer Concern.* Low to Moderate. Existing utility infrastructure is noticeable in the foreground to middleground landscape viewed from Dale Road, which serves primarily as an access road for agricultural workers. Travelers on Dale Road would likely perceive an increase in industrial character, structure prominence, or view blockage of the higher value landscape features (e.g., the valley floor, foothills, and background sky) from the proposed Banducci Substation as an adverse visual change.

*Viewer Exposure.* Moderate. The proposed Banducci Substation would be highly visible in the foreground views of travelers on Dale Road. The number of viewers, however, would be very low as this road is used

primarily as an access road for agricultural workers. The duration of view would be moderate due to the prominence of the substation components (the tallest being up to approximately 75 feet high) within an approximately 3.3-acre walled-in facility on the flat valley floor. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate for viewer exposure.

*Overall Visual Sensitivity.* Moderate. For viewers in the vicinity of KOP 2, combining the equally weighted Moderate visual quality, Low to Moderate viewer concern, and Moderate viewer exposure results in an overall rating of Moderate for visual sensitivity of the visual setting and viewing characteristics.

### ***KOP 3 – Pelliser Road Viewing North***

Figure 5.1-7A presents a life-size scale view of the proposed substation site from KOP 3, approximately 0.2 miles south of the site looking north toward the site from Pelliser Road. The view captures a portion of the predominately rural agricultural landscape that comprises much of Cummings Valley. The Tehachapi Mountains provide a backdrop to the flat valley floor. The proposed substation would be located in the open field shown in the right-center of the image. Figure 5.1-7B presents reduced images of the existing view and a simulation of the view with the proposed Banducci Substation.

*Visual Quality.* Low to Moderate. The landscape is predominantly rural in character, and much of it consists of cultivated row crops. Existing utility infrastructure with prominent vertical forms and lines are prevalent along Pelliser Road and the adjacent agricultural access road (Dale Road). Agricultural facilities and rural residences punctuate the flat valley floor. The foothills of the Tehachapi Mountains define the northern extent of the valley and are more natural in appearance, providing a backdrop of visual interest in contrast to the flat valley floor.

*Viewer Concern.* Moderate to High. Existing utility infrastructure is noticeable in the foreground to middleground landscapes viewed from Pelliser Road, and travelers on Pelliser Road anticipate the prominent presence of this utility infrastructure. However, the same travelers would perceive a substantial increase in industrial character, structure prominence, or view blockage of the higher value landscape features (e.g. the valley floor and foothills) from the proposed Banducci Substation as an adverse visual change, particularly if it diminishes the overall rural character of the valley.

*Viewer Exposure.* Moderate to High. The proposed Banducci Substation would be highly visible in the foreground views of travelers on Pelliser Road. The number of viewers would be moderate; the average daily traffic on Pelliser Road is 1,700 vehicle trips per day (SCE, 2012). The duration of view would be moderate due to the prominence of the substation components (the tallest being up to approximately 75 feet high) within an approximately 3.3-acre walled-in facility on the flat valley floor. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

*Overall Visual Sensitivity.* Moderate. For viewers in the vicinity of KOP 3, combining the equally weighted Low to Moderate visual quality, Moderate to High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate for visual sensitivity of the visual setting and viewing characteristics.

### ***KOP 4 – Highline Road***

Figure 5.1-8A presents a life-size scale view of the proposed substation site from KOP 4, approximately 0.64 miles northeast of the site looking to the southwest toward the site from Highline Road. The view is across agricultural fields south of Highline Road and east of Pelliser Road. The proposed substation

would be located in front of, and to the right of, the grouping of trees in the left-center of the image. Figure 5.1-8B presents reduced images of the existing view and a simulation of the view with the proposed Banducci Substation. The presence of snow in the image provides a backdrop that causes the substation to blend into the background more than it would during non-snow conditions that are more typical of the area.

*Visual Quality.* Moderate. The landscape is predominantly rural in character with row crops, scattered agricultural facilities, and rural residences. Existing utility infrastructure with prominent vertical forms and lines are noticeable adjacent to the proposed substation site. The foothills of the Tehachapi Mountains to the south provide a backdrop of visual interest in contrast to the flat valley floor.

*Viewer Concern.* Moderate to High. This portion of Highline Road provides local access for a very few nearby rural residences and agricultural operations. Although travelers on Highline Road and the adjacent residents anticipate the presence of the existing, distant utility infrastructure, they would perceive a substantial increase in industrial character, structure prominence, or view blockage of the higher value landscape features (e.g., the valley floor and foothills) from the proposed Banducci Substation as an adverse visual change, particularly if it diminishes the overall rural character of the valley.

*Viewer Exposure.* Moderate. The proposed Banducci Substation would be moderately visible in the middle-ground views of travelers on Highline Road and adjacent residents. The number of traveling viewers, however, would be very low as this road is used primarily as local access for nearby rural residences and agricultural operations. The duration of view for residents would be moderate to extended due to their stationary views of the proposed substation site. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate for viewer exposure.

*Overall Visual Sensitivity.* Moderate. For viewers in the vicinity of KOP 4, combining the equally weighted Moderate visual quality, Moderate to High viewer concern, and Moderate viewer exposure results in an overall rating of Moderate for visual sensitivity of the visual setting and viewing characteristics.

### ***KOP 5 – Pelliser Road Viewing South***

Figure 5.1-9A presents a life-size scale view of the proposed substation site from KOP 5, approximately 0.1 miles north of the site looking south toward the site from Pelliser Road. The view is across an agricultural field, and the substation would be located just beyond Dale Road (the light-colored, thin, horizontal line that traverses the center of the image from right to left). Figure 5.1-9B presents reduced images of the existing view and a simulation of the view with the proposed Banducci Substation. It should be noted that KOP 5 would be more appropriately located on the west side of Pelliser Road in the proper travel lane for a south-southeast view. In so doing, the existing Low to Moderate visual quality (discussed below) would be more obvious because the roadside utility poles would appear much more prominent in the foreground field of view.

*Visual Quality.* Low to Moderate. The landscape is predominantly rural in character, and much of it consists of cultivated row crops. Existing utility infrastructure with prominent vertical forms and lines is prevalent along Pelliser Road and Dale Road. The foothills of the Tehachapi Mountains define the southern extent of the valley and are more natural in appearance, providing a backdrop of visual interest in contrast to the flat valley floor.

*Viewer Concern.* Moderate to High. Existing utility infrastructure is noticeable in the foreground to middleground views from Pelliser Road, and travelers on Pelliser Road anticipate the prominent presence of this utility infrastructure. However, the same travelers would perceive a substantial increase in

industrial character, structure prominence, or view blockage of the higher value landscape features (e.g., the valley floor and foothills) from the proposed Banducci Substation as an adverse visual change, particularly if it diminishes the overall rural character of the valley.

*Viewer Exposure.* Moderate to High. The proposed Banducci Substation would be highly visible in the foreground views of travelers on Pelliser Road. The number of viewers would be moderate; the average daily traffic on Pelliser Road is 1,700 vehicle trips per day (SCE, 2012). The duration of view would be moderate due to the prominence of the substation components (the tallest being up to approximately 75 feet high) within an approximately 3.3-acre walled-in facility on the flat valley floor. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

*Overall Visual Sensitivity.* Moderate. For viewers in the vicinity of KOP 5 and the proposed substation site, combining the equally weighted Low to Moderate visual quality, Moderate to High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate for visual sensitivity of the visual setting and viewing characteristics.

### **KOP 6 – Near Bailey Road**

Figure 5.1-10A presents a life-size scale view of the proposed substation site from KOP 6, approximately 0.33 miles southeast of the site looking northwest toward the site from a residential access road off of, and to the west of, Bailey Road. This panoramic view is to the northwest across an agricultural field; two rural residences are located in the immediate vicinity of this KOP. The proposed substation would be located in the field in the center of the image to the left of the large, white, agricultural facilities. Figure 5.1-10B presents reduced images of the existing view and a simulation of the view with the proposed Banducci Substation.

*Visual Quality.* Moderate. The landscape is predominantly rural in character with row crops and scattered agricultural facilities and rural residences. Existing utility infrastructure and large, agricultural facilities with prominent vertical forms and lines are noticeable adjacent to the proposed substation site. The foothills of the Tehachapi Mountains to the north and west provide a backdrop of visual interest in contrast to the flat valley floor.

*Viewer Concern.* Moderate to High. Bailey Road provides local access for rural residences and agricultural operations and is considered representative of views from residences off of Bailey and Banducci roads. Although residents anticipate the presence of the existing, distant utility infrastructure, they would likely perceive an increase in industrial character, structure prominence, or view blockage of the higher value landscape features (e.g., the valley floor and foothills) from the proposed Banducci Substation as an adverse visual change, particularly if it diminishes the overall rural character of the valley.

*Viewer Exposure.* Moderate. The proposed Banducci Substation would be moderately visible in the foreground views of travelers on Bailey Road and from nearby residences. The number of viewers, however, would be very low as this is only a local access road, and the number of residences is limited. The duration of view would be moderate to extended for residents, however, due to their stationary views of the site. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate for viewer exposure.

*Overall Visual Sensitivity.* Moderate. For viewers in the vicinity of KOP 6, combining the equally weighted Moderate visual quality, Moderate to High viewer concern, and Moderate viewer exposure results in an overall rating of Moderate for visual sensitivity of the visual setting and viewing characteristics.



**Existing Sources of Light and Glare.** The proposed Banducci Substation site is agricultural land that is not a source of light and glare. Scattered structures and residences, as well as the California Correctional Institution, are located near the proposed substation site and serve as existing sources of light and glare in the area. Along the proposed fiber optic communications routes, there are existing residences, commercial buildings, and other structures, along with vehicle headlights, that serve as sources of existing light and glare in those areas. Overall, light and glare within the Proposed Project area are minimal.

## Regulatory Background

The regulatory framework provided in this section identifies State, regional, or local statutes, ordinances, or policies that protect or enhance public scenic resources in the Proposed Project area. The Proposed Project would not result in the disturbance or conversion of existing federally owned or operated land areas. Therefore, there are no federal visual resources regulations, policies, plans, or guidelines that pertain to the Proposed Project.

The California Public Utilities Commission (CPUC) General Order No. 131-D, Section XIV B states that “local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the Commission’s jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters.”

**California Streets and Highways Code.** The California Scenic Highway Program preserves and protects scenic highway corridors from changes that would diminish the aesthetic value of these corridors. The California Department of Transportation (Caltrans) designates scenic highway corridors and establishes the highways that are eligible for the program. The California Streets and Highways Code includes a list of highways that are either eligible for designation or are designated as an “Officially Designated State Scenic Highway” (Caltrans, 2014). Currently, there are no Officially Designated State Scenic Highways within Kern County. As such, the Proposed Project is not within the viewshed of any designated scenic highway.

The Scenic Highway Program does, however, identify portions of SR-14 north of Mojave and SR-58 east of Mojave as “Eligible State Scenic Highways” (Caltrans, 2014). The proposed Banducci Substation site is located approximately 25 miles west and approximately 25 miles northwest of those portions of SR-14 and SR-58, respectively. The nearest proposed fiber optic communication facility is located 13 miles west and 13 miles northwest of the nearest Eligible State Scenic Highway portions of SR-14 and SR-58, respectively.

**Kern County General Plan.** Kern County recognizes the importance of aesthetic resources and has developed policies to protect visually sensitive areas while minimizing impacts from the light and glare of new development projects as outlined in the Kern County General Plan (Kern County Planning and Community Development Department, 2004). Specifically, Section 1.10.7 of the General Plan lists these two policies:

- Policy 47. Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.
- Policy 48. Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.

**Kern County Zoning Ordinance.** Section 19.81 of the Kern County Zoning Ordinance is titled the Outdoor Lighting Ordinance or “Dark Sky Ordinance.” This ordinance provides principles for ensuring that the

“natural dark skies” that are considered part of the existing character of Kern County are maintained (Kern County, 2012). The Dark Sky Ordinance states that “excessive illumination can create a glow that may obscure the night sky and excessive illumination or glare may constitute a nuisance” (Kern County, 2012).

**Greater Tehachapi Area Specific and Community Plan.** The GTA is the collection of unincorporated communities located in eastern Kern County along SR-58 between the San Joaquin Valley and the Mojave Desert. The GTA generally encompasses the rural communities of Alpine Forest, Bear Valley Springs, Brite Valley, Cummings Ranch, Cummings Valley, Golden Hills, Mendiburu Springs, Monolith, Old Towne, and Stallion Springs. Kern County has adopted a GTA Specific and Community Plan (Kern County Planning and Community Development Department, 2010) that sets forth a land use plan and goals, policies, and implementation measures designed to ensure that future development in the GTA is consistent with the goals and policies of Kern County’s General Plan while recognizing the uniqueness of the region. The Proposed Project is located within the GTA Specific and Community Plan Area. The following policies from the GTA Specific and Community Plan are applicable to aesthetic resources.

#### *General Land Use and Development*

- Policy LU.7 “Dark Sky” principles of lighting control shall be required in all new development.

#### *Conservation and Open Space (Scenic and Natural Resources)*

- Policy COS.18 Discourage new ridgeline development, including structure elevations that protrude above major ridgelines.
- Policy COS.23 Comply with dark sky lighting guidelines as established by the Kern County Zoning Ordinance to preserve nighttime views, prevent light pollution, and minimize impacts on wildlife.

### **Applicant Proposed Measures**

No Applicant Proposed Measures are proposed for aesthetic resources.

## **5.1.2 Environmental Impacts and Mitigation Measures**

### ***Visual Impact Assessment Methodology***

The factors considered in determining impacts to visual resources included: (1) scenic quality of the Proposed Project area; (2) available visual access and visibility, and frequency and duration that the landscape is viewed; (3) viewing distance and degree to which Proposed Project components would dominate the view of the observer; (4) resulting contrast of the Proposed Project components or activities with existing landscape characteristics; (5) the extent to which Proposed Project features or activities would block views of higher value landscape features; and (6) the level of public interest in the existing landscape characteristics and concern over potential changes.

An adverse visual impact occurs within public view when: (1) an action perceptibly changes existing features of the physical environment so that they no longer appear to be characteristic of the subject locality or region; (2) an action introduces new features to the physical environment that are perceptibly uncharacteristic of the region and/or locale; or (3) aesthetic features of the landscape become less visible (e.g., partially or totally blocked from view) or are removed. Changes that seem uncharacteristic are those that appear out of place, discordant, or distracting and can result from project component size, scale, or character relative to existing landscape features and the placement of project components relative to developed features. The degree of the visual impact depends upon how noticeable the adverse

change may be. The noticeability of a visual impact is a function of the characteristics of project features, context, and viewing conditions (angle of view, distance, primary viewing direction, and duration of view).

Impacts to visual resources within the Proposed Project area could result from various activities including substation construction, installation of the cable loops, structure replacement, landform modification, and Proposed Project operation or the presence of the built facilities. The approach to impact assessment is discussed below.

Under the Visual Sensitivity-Visual Change methodology, field analysis at each KOP included assessment of visual contrast, project dominance, and view blockage. Subsequently, a conclusion was made regarding the extent of overall visual change, and taken together with the existing landscape's visual sensitivity, the level of probable visual impact significance was determined. A visual simulation was prepared for the PEA for each KOP. The preliminary impact was determined based on further evaluation of each KOP. A conclusion on initial impact significance was then reached. The impact situation was further evaluated against the application of feasible mitigation measures, if necessary, in an effort to reduce the visual impact. A final conclusion on impact significance was then reached.

**Visual Contrast** describes the degree to which a project's visual characteristics or elements (consisting of form, line, color, and texture) differ from the same visual elements present in the existing landscape. The degree of contrast can range from Low to High. The presence of forms, lines, colors, and textures in the landscape similar to those of a project's indicates a landscape more capable of accepting those project characteristics than a landscape where those elements are absent. This ability to accept alteration is often referred to as visual absorption capability and typically is inversely proportional to visual contrast.

**Project Dominance** is a measure of a feature's apparent size relative to other visible landscape features and the total field of view. A feature's dominance is affected by its relative location in the field of view and the distance between the viewer and the feature. The level of dominance can range from Subordinate to Dominant.

**View Blockage** or **Impairment** describes the extent to which any previously visible landscape features are blocked from view as a result of a project's scale and/or position. Blockage of higher quality landscape features by lower quality project features causes adverse visual impacts. The degree of view blockage can range from None to High.

**Overall Visual Change** is a concluding assessment as to the degree of change that would be caused by a project. Overall visual change is derived by combining the three equally weighted factors of visual contrast, project dominance, and view blockage. Overall visual change can range from Low to High.

Under the Visual Sensitivity-Visual Change method, the determination of which aesthetic changes cross a threshold of "substantial adverse effect" or degradation, and the degree of impact significance that results, is a function of overall visual sensitivity and visual change. Table 5.1-1, below, illustrates the general interrelationship between visual sensitivity and visual change and is used as a consistency check between individual KOP evaluations. Actual parameter determinations (e.g., visual contrast, project dominance, and view blockage) are based on an analyst's experience and site-specific circumstances.

While the interrelationships presented in Table 5.1-1 are intended as guidance only, it is reasonable to conclude that lower visual sensitivity ratings paired with lower visual change ratings generally will correlate well with lower degrees of impact significance when viewed in the field. Conversely, higher visual sensitivity ratings paired with higher visual change ratings will tend to result in higher degrees of visual impact.

Implicit in this rating methodology is the acknowledgment that for a visual impact to be considered significant two conditions generally exist: (1) the existing landscape is of reasonably high quality and is relatively valued by viewers; and (2) the perceived incompatibility of one or more elements or characteristics of a project tends toward the high extreme, leading to a substantial reduction in visual quality.

**Table 5.1-1. Visual Impact Significance Criteria**

Visual Sensitivity	Visual Change				
	Low	Low to Moderate	Moderate	Moderate to High	High
Low	Minor and Less than Significant <sup>1</sup>	Minor and Less than Significant	Less than Significant <sup>2</sup>	Less than Significant	Less than Significant
Low to Moderate	Minor and Less than Significant	Less than Significant	Less than Significant	Less than Significant	Potentially Significant <sup>3</sup>
Moderate	Less than Significant	Less than Significant	Less than Significant	Potentially Significant	Potentially Significant
Moderate to High	Less than Significant	Less than Significant	Potentially Significant	Potentially Significant	Significant <sup>4</sup>
High	Less than Significant	Potentially Significant	Potentially Significant	Significant	Significant

1 - **Minor and Less than Significant** – Impacts are visible but are considered minor and Less than Significant in the context of existing landscape characteristics and viewing opportunities.

2 - **Less than Significant** – Impacts are perceived as negative but do not exceed environmental thresholds.

3 - **Potentially Significant** – Impacts are perceived as negative and may exceed environmental thresholds depending on project- and site-specific circumstances. Implementation of effective mitigation may reduce a significant impact to a Less than Significant level.

4 - **Significant** – Impacts exceed environmental thresholds. Implementation of effective mitigation may reduce a significant impact to a Less than Significant level.

In addition, a project is evaluated for conformance with applicable regulations and policies. Adopted expressions of public policy pertaining to visual resources are given weight in determining both visual quality and viewer concern.

### Project Visual Description

The Proposed Project would add utility infrastructure to that already existing in the Proposed Project area and would include a new electric substation, construction of two new 66 kV subtransmission line segments (one that would enter and one that would exit the new electric substation), and installation of new fiber optic communications cables along two routes.

The new substation would be located within a perimeter wall enclosing an approximately 3.3-acre site on an approximately 6.3-acre parcel of agricultural land in the largely agricultural Cummings Valley. The proposed substation’s perimeter wall would be eight feet high and constructed of light-colored, decorative or pre-cast concrete masonry material. A band of at least three strands of barbed wire would be affixed near the top of the wall inside of the proposed substation and would not be visible from the outside. Existing wood utility poles occur along Pelliser and Dale roads bordering the proposed substation site to the west and north, respectively.

Construction of two new 66 kV subtransmission line segments into and out of the proposed substation would involve the placement of eight new tubular steel poles (TSPs); two new lightweight steel poles (LWSs); and removal, removal and replacement, and installation of new, wood poles. Steel poles are not currently present in the landscape of Cummings Valley. The same types of wood poles (i.e., replaced and new poles), however, are already present in Cummings Valley, including along Pelliser and Dale roads.

The two new LWS poles would be direct buried inside the proposed substation's perimeter wall and would extend approximately 65 to 75 feet above ground level. The diameter of the LWS poles would typically be 2 to 3 feet at ground level, tapering to approximately 10 to 12 inches in diameter at the top. The LWS poles would be galvanized and be of a dull gray color.

A total of eight TSPs would be installed. Four of the proposed TSPs would be located inside the proposed substation's perimeter wall: two would be approximately 65 feet in height, and two would be approximately 55 feet in height. Two more TSPs would be located outside the proposed substation's perimeter wall but still on SCE property. Both of these TSPs would be approximately 65 feet in height. The last two TSPs would be used for self-supporting guy stubs and would be approximately 35 feet in height. These guy stubs would be located on the west side of Pelliser Road across from the proposed substation site. The eight new TSP structures, including arm attachments, would be constructed entirely of galvanized steel and would be a dull gray color. The diameter of the TSPs would range from approximately 18 to 36 inches, and the TSPs would be bolted to concrete foundations that would be approximately 3 to 10 feet in diameter. The foundations would extend underground with approximately 18 to 24 inches of concrete visible above ground.

The new fiber optic communications cables would be hung on existing wood poles along two proposed routes (Figure 5.1-1A), as follows:

- Fiber optic communications Route 1 travels in a nearly direct west-east direction and is approximately 14.5 miles long. The fiber optic cable would be underground from the proposed Banducci Substation and would transition to an overhead position on existing wood poles on Highline Road for six miles until it transitions underground again before entering Cumming's Substation. After exiting Cumming's Substation, the cable would transition to an overhead position on existing wood poles again where it would continue for 7.5 miles to an existing pole outside the existing Monolith Substation where it would once again transition underground to enter the substation (Figure 5.1-1A).
- Fiber optic communications Route 2 travels in a west-east direction but meanders north and south primarily along paved roadways or railroad tracks. The fiber optic cable would be underground from the proposed Banducci Substation and would transition to an overhead position on a new wood pole on Pelliser Road (an existing wood-pole line is already present along Pelliser Road). From this position, it would travel mostly overhead on existing wood poles but would be undergrounded at times. The total approximate length of this route is 17.5 miles.

## Aesthetics Impacts

### ***a. Would the project have a substantial adverse effect on a scenic vista?***

*LESS THAN SIGNIFICANT.* The Conservation and Open Space chapter (Scenic and Natural Resources) of the GTA Specific and Community Plan has a policy to discourage new development on ridgelines (or that protrudes above major ridgelines). Both of the proposed fiber optic communications routes occur along existing wood utility poles with the exception of 39 new replacement wood poles that would have the same appearance and height as those being replaced. Although some poles would extend above the horizon when viewed from inferior (lower) viewpoints along the roads adjacent to the fiber optic routes, this is

an existing impact that would not change with the Proposed Project. The proposed Banducci Substation would occur on agricultural land in the flat bottom of Cummings Valley; it would not be on a ridgeline or protrude above a major ridgeline. The Proposed Project, therefore, would not have a substantial adverse effect on a scenic vista. The impact would be less than significant, and no mitigation is proposed.

***b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?***

*NO IMPACT.* The California Scenic Highway Program identifies portions of SR-14 north of Mojave and SR-58 east of Mojave as “Eligible State Scenic Highways” (Caltrans, 2011). The proposed Banducci Substation site is located approximately 25 miles west and approximately 25 miles northwest of those portions of SR-14 and SR-58, respectively. The nearest proposed fiber optic communications facility is located 13 miles west and 13 miles northwest of the nearest Eligible State Scenic Highway portions of SR-14 and SR-58, respectively. The Proposed Project, therefore, would not be visible from the eligible portions of these highways, would not diminish the aesthetic value of lands adjacent to such highways, and would have no effect on the California Scenic Highway Program. No mitigation is proposed.

***c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?***

*LESS THAN SIGNIFICANT DURING CONSTRUCTION.* During construction, equipment, personnel, and activities would be seen by various viewers in the immediate vicinity of the proposed Banducci Substation site, at subtransmission wire pull and tension sites, along the fiber optic cable routes, and at up to four temporary staging areas or yards. These viewers would include nearby residents and travelers on local roads. View durations from these vantage points would vary from Moderate to Extended. However, construction activities would be temporary, and cable installation would be transient with limited viewing opportunities of any given location or segment. As a result, the temporary visual impacts associated with Proposed Project construction would be less than significant, and no mitigation is proposed.

*LESS THAN SIGNIFICANT DURING OPERATION.* The Proposed Project was evaluated from six representative KOPs. The following paragraphs discuss the visual impacts from the proposed Banducci Substation site that would be experienced at each KOP. The addition of a fiber optic communications cables to existing utility lines along Route 1 and Route 2 would not be noticeable to the casual viewer and the 39 new replacement wood poles would have the same appearance and height as the existing poles. Therefore, the visual impact from the fiber optic communications cables would be less than significant, and no mitigation is proposed for that Project component.

**KOP 1 – Pelliser Road Viewing South**

Figure 5.1-5A presents a life-size scale view of the proposed substation site from KOP 1, approximately 0.5 miles north of the site looking south toward the site from southbound Pelliser Road. The proposed substation would be located adjacent to, and to the east of (to the left of), Pelliser Road in an open, agricultural field. Figure 5.1-5B presents the reduced PEA images of the existing view and a simulation of the view with the proposed Banducci Substation. The presence of snow in the image provides a backdrop that causes the substation to blend into the background more than it would during non-snow conditions that are more typical of the area.

The substation would be located immediately adjacent to existing utility lines along Pelliser Road and Dale Road. Approaching from the north on Pelliser Road, the proposed substation would be viewed through existing roadside utility infrastructure, and at a viewing distance of 0.5 miles and greater, the proposed substation would not appear visually prominent. It would, however, introduce some additional

industrial character into the landscape. When viewed from KOP 1, the visual contrast between the structural forms, lines, colors, and textures of the substation against the existing landscape would be Low to Moderate. From this vantage point, the Proposed Project structures would appear Subordinate relative to the foreground utility poles and background foothills (project dominance). The degree of view blockage of the valley floor and foothills would be Low. The overall visual change would be Low when the three equally weighted factors of visual contrast, project dominance, and view blockage are combined. In the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual impact would be less than significant. In addition, the Applicant is proposing a perimeter wall and landscaping for the substation to filter views for the surrounding community and other potential sensitive receptors. This proposed substation screening would soften the structural contrast and reduce the visible industrial character of the facility.

### **KOP 2 – Dale Road**

Figure 5.1-6A presents a life-size scale view of the proposed substation site from KOP 2, approximately 0.22 miles west of the site looking east toward the site from Dale Road. The view captures a portion of the predominantly rural, agricultural landscape that comprises much of Cummings Valley. The Tehachapi Mountains provide a backdrop to the flat valley floor. Figure 5.1-6B presents the reduced PEA images of the existing view and a simulation of the view with the proposed Banducci Substation.

The proposed substation would be highly visible and central in views to the east from KOP 2 and Dale Road. The new proposed facility would appear structurally complex and exhibit industrial character. The visual contrast between the structural forms, lines, colors, and textures of the substation against the existing landscape would be Moderate. From KOP 2 and similar vantage points, the Proposed Project structures would appear Co-dominant relative to the adjacent utility poles and background foothills (project dominance). Although the facility would blend somewhat with the mottled background of the valley floor and foothills, the structures would cause Low to Moderate view blockage of those features (and slight skylining from the top of one steel pole [i.e., the pole would extend slightly above the foothill on the horizon]). The overall visual change would be Moderate when the three equally weighted factors of visual contrast, project dominance, and view blockage are combined. In the context of the existing landscape's Moderate visual sensitivity, the resulting visual impact would be less than significant.

### **KOP 3 – Pelliser Road Viewing North**

Figure 5.1-7A presents a life-size scale view of the proposed substation site from KOP 3, approximately 0.2 miles south of the site looking north toward the site from Pelliser Road. The view captures a portion of the predominately rural agricultural landscape that comprises much of Cummings Valley. The Tehachapi Mountains provide a backdrop to the flat valley floor. Figure 5.1-7B presents the reduced PEA images of the existing view and a simulation of the view with the proposed Banducci Substation.

The proposed substation would be highly visible along Pelliser Road and central in views to the north and northeast when viewing from KOP 3. The proposed substation would appear structurally complex and exhibit industrial character. The visual contrast between the structural forms, lines, colors, and textures of the substation against the existing landscape would be Moderate to High. From KOP 3 and similar vantage points, the Proposed Project structures would appear Co-dominant relative to the foreground utility poles and background foothills (project dominance). Although the facility would blend somewhat with the mottled background of the Tehachapi foothills, the structures would cause Low to Moderate view blockage of the valley floor and foothills. The overall visual change would be Moderate when the three equally weighted factors of visual contrast, project dominance, and view blockage are combined.

In the context of the existing landscape's Moderate visual sensitivity, the resulting visual impact would be less than significant.

#### **KOP 4 – Highline Road**

Figure 5.1-8A presents a life-size scale view of the proposed substation site from KOP 4, approximately 0.64 miles northeast of the site looking to the southwest toward the site from Highline Road. The view is across agricultural fields south of Highline Road and east of Pelliser Road. The proposed substation would be located in front of, and to the right of, the grouping of trees in the left-center of the image. Figure 5.1-8B presents the reduced PEA images of the existing view and a simulation of the view with the proposed Banducci Substation. The presence of snow in the image provides a backdrop that causes the substation to blend into the background more than it would during non-snow conditions that are more typical of the area.

The proposed substation would be located immediately adjacent to existing utility lines along Pelliser Road and Dale Road. Viewed from Highline Road and adjacent residences at a viewing distance of approximately 0.64 miles, the proposed substation would introduce some industrial character into the landscape, although the visual contrast with the existing landscape would be Low to Moderate. The proposed substation would not appear visually prominent (Subordinate project dominance), and view blockage of the valley floor and foothills would be Low. The overall visual change would be Low when the three equally weighted factors of visual contrast, project dominance, and view blockage are combined. In the context of the existing landscape's Moderate visual sensitivity, the resulting visual impact would be less than significant.

#### **KOP 5 – Pelliser Road Viewing South**

Figure 5.1-9A presents a life-size scale view of the proposed substation site from KOP 5, approximately 0.1 miles north of the site looking south toward the site from southbound Pelliser Road. The view is across an agricultural field, and the proposed substation would be located just beyond Dale Road. Figure 5.1-9B presents the reduced PEA images of the existing view and a simulation of the view with the proposed Banducci Substation.

The proposed substation would be highly visible along Pelliser Road and central in views to the south and southeast when approaching from the north and viewing from KOP 5. The proposed substation would appear structurally complex and exhibit industrial character. The visual contrast between the structural forms, lines, colors, and textures of the substation against the existing landscape would be Moderate to High. From KOP 5 and similar, close-in vantage points, the Proposed Project structures would appear Co-dominant relative to the adjacent utility poles and background foothills (project dominance). As previously mentioned, the prominence of the existing roadside utility poles would appear much more obvious if KOP 5 were more appropriately situated on Pelliser Road, and not on the northbound shoulder. While the perimeter wall would blend somewhat with the background of the valley floor and Tehachapi foothills, the proposed substation and its taller project components would cause Moderate view blockage of those features. The overall visual change would be Moderate when the three equally weighted factors of visual contrast, project dominance, and view blockage are combined. In the context of the existing landscape's Moderate visual sensitivity, the resulting visual impact would be less than significant.

#### **KOP 6 – Near Bailey Road**

Figure 5.1-10A presents a life-size scale view of the proposed substation site from KOP 6, approximately 0.33 miles southeast of the site looking northwest toward the site from a residential access road off of,



and to the west of, Bailey Road. Two rural residences are located in the immediate vicinity of this KOP. The proposed substation would be located in the field in the center of the image to the left of the large, white, agricultural facilities. Figure 5.1-10B presents the reduced PEA images of the existing view and a simulation of the view with the proposed Banducci Substation.

The proposed substation would be located immediately adjacent to existing utility lines along Pelliser Road and Dale Road. Viewed from the residential access road and residences southeast of the site (at a distance of approximately 0.33 miles), the new structures would introduce some additional industrial character into the landscape. The visual contrast between the structural forms, lines, colors, and textures of the substation against the existing landscape would be Moderate, but the proposed substation would not appear visually prominent (Subordinate to Co-Dominant project dominance), and the view blockage of the valley floor and foothills would be Low. The overall visual change would be Low to Moderate when the three equally weighted factors of visual contrast, project dominance, and view blockage are combined. In the context of the existing landscape's Moderate visual sensitivity, the resulting visual impact would be less than significant.

**d. *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

*LESS THAN SIGNIFICANT.* The new steel poles and substation components (e.g., switchracks) may reflect light during the day. However, SCE's proposals to: (a) dull the galvanized finish of the new steel poles to reduce glare, (b) install a perimeter screen wall, and (c) install landscaping to filter views of the site from residences and adjacent roads, should sufficiently reduce the potential for daytime structural glare such that any resulting visual impact would be less than significant.

The wooden replacement poles for the proposed fiber optic telecommunication cable installation would not generate glare. The new fiber optic telecommunication cables that would be installed have a small diameter and would not represent a new source of glare.

Lighting at the proposed Banducci Substation has the potential to adversely affect nighttime views in the immediate substation vicinity. Proposed substation lighting would consist of LED (light emitting diodes), low-intensity lights located in the switchracks, around the transformer banks, and in areas of the yard where operation and maintenance activities may take place during evening hours for emergency/scheduled work. Maintenance lights would be controlled by a manual switch and would normally be in the "off" position. The maintenance lights would be directed downward to reduce glare outside the facility. A light indicating the operation of the rolling gate would automatically turn on once the gate begins to open and would turn off shortly after the gate is closed. With these lighting controls, in combination with the substation screening provided by the perimeter wall and landscaping (discussed above), it is expected that the nighttime lighting impacts caused by the proposed substation would be less than significant.

There would be no nighttime lighting (and therefore, glare) associated with the fiber optic communications cable routes, and no mitigation is proposed for that project component.

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**LEGEND**

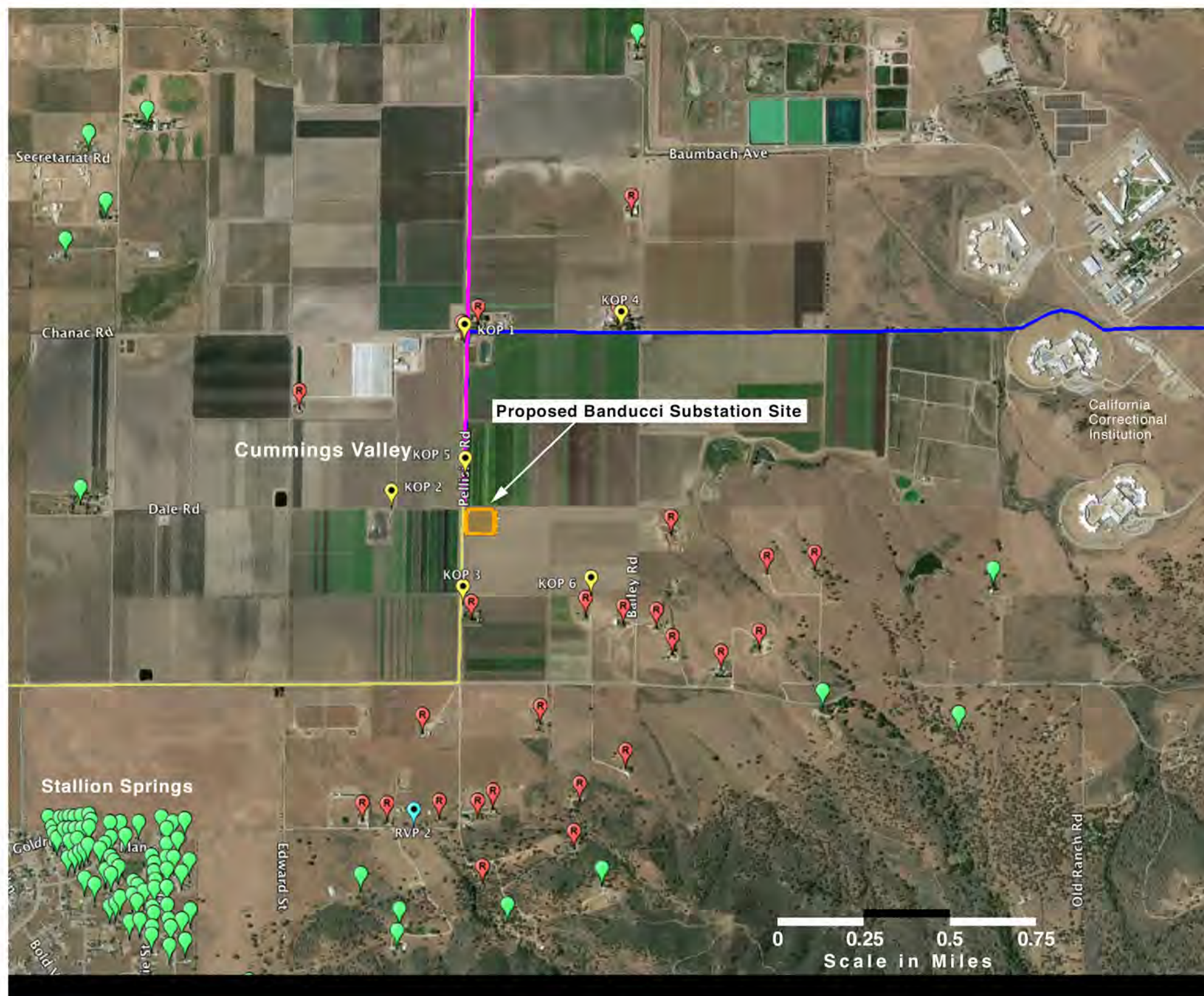
- Key Observation Point (KOP)
- Regional Viewpoint (RVP)
- Proposed Banducci Substation
- Fiber Optic Communications Route 1
- Residence Less Than One Mile from Proposed Substation
- Residence 1 to 1.5 Miles from Proposed Substation
- Fiber Optic Communications Route 2

This modified Google Earth image presents a **Regional Viewpoint Map** that encompasses both the proposed substation development area (Cummings Valley) and the fiber optic communications routes (to the east). The map indicates the location of Key Observation Points selected for detailed analysis and several Regional Viewpoints used for additional landscape visibility discussion. The locations of residences in the vicinity of the proposed substation site are also indicated with red and green symbols.








**VIEWPOINT MAP  
REGIONAL**

**SCE Banducci Substation Project  
MND / Initial Study  
Aesthetics  
Figure 5.1-1A**

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**LEGEND**

-  Key Observation Point (KOP)
-  Regional Viewpoint (RVP)
-  Proposed Banducci Substation Site
-  Fiber Optic Communications Route 1
-  Fiber Optic Communications Route 2
-  Residence Less Than 1 Mile from Proposed Substation Site
-  Residence 1 to 1.5 Miles from Proposed Substation Site

This modified Google Earth image presents a map of the Cummings Valley **Key Observation Points (KOPs)**. The six KOP locations are indicated with yellow symbols. The 26 rural residences within one mile of the proposed substation site are indicated with red symbols, and the numerous residences within 1 to 1.5 miles of the site are indicated with green symbols. However, substation site visibility from Stallion Springs is primarily limited to the residences along the north and east perimeters of the residential development.

<p><b>VIEWPOINT MAP</b></p> <hr/> <p><b>CUMMINGS VALLEY</b></p>	<p><b>SCE Banducci Substation Project</b> MND / Initial Study <b>Aesthetics</b> <b>Figure 5.1-1B</b></p>
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Proposed Banducci Substation Site



Michael Clayton & Associates

Latitude: 35° 8' 9.13" N Longitude: 118° 33' 42.42" W

This image presents the **existing view** from **Regional Viewpoint 1**, along **SR 202**, in the northeastern portion of Cummings Valley. The view is to the southwest and overlooks Cummings Valley. This panoramic view captures much of the rural character of the valley and encompasses the flat valley bottom, dispersed agricultural facilities, ranch and farm lands, rural residences, numerous utility facilities, and surrounding hills that define the valley extent. The viewing distance across the valley in this image is approximately six miles.

**Regional Viewpoint 1**  
**West Valley Blvd.**  
**Viewing Southwest**

**SCE Banducci Substation Project**  
**MND / Initial Study**  
**Aesthetics**  
**Figure 5.1-2**

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This image presents the **existing view** from **Regional Viewpoint 2**, on **Ronnie Avenue**, a rural residential access road in the southern extent of Cummings Valley. This panoramic view overlooks the valley to the north and captures much of the valley's rural character. Numerous utility poles are visible in the open landscape. The proposed substation would be located in the open field just beyond and slightly to the left of the grouping of trees in the center of the image. The viewing distance would be approximately 0.85 mile.

**Regional Viewpoint 2**  
**Ronnie Avenue**  
**Viewing North**

**SCE Banducci Substation Project**  
**MND / Initial Study**  
**Aesthetics**  
**Figure 5.1-3**

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This image presents the **existing view** from **Regional Viewpoint 3**, on **Highline Road**, east of Brite Lake, west of Cummings Substation, and southwest of downtown Tehachapi. This view to the east is down Highline Road as it transects the rural ranching country north of the Tehachapi foothills. The utility line along the north (left) side of the road in the image is a portion of the fiber optic communications Route 1.

**Regional Viewpoint 3**  
**Highline Road**  
**Viewing East**

**SCE Banducci Substation Project**  
**MND / Initial Study**  
**Aesthetics**  
**Figure 5.1-4**

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This image presents the **existing view** from **Key Observation Point (KOP) 1**, on southbound **Pelliser Road**, approximately 0.5 mile north of the proposed substation site in Cummings Valley. The view is to the south down Pelliser Road and captures a central portion of the rural Cummings Valley back-dropped by the Tehachapi Mountains. The proposed substation would be located adjacent and to the east (left) of Pelliser Road in an open agricultural field. The utility line on the left is a portion of the fiber optic communications Route 2.

**KOP 1  
Pelliser Road  
Viewing South**

**SCE Banducci Substation Project  
MND / Initial Study  
Aesthetics  
Figure 5.1-5A**

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View from: **Pelliser Road - North** - Existing Condition





View from: **Pelliser Road - North** - Proposed Condition



Easting Position (SPCS-California Zone 5) : **6381614.6**  
 Northing Position (SPCS-California Zone 5): **2226286.9**  
 Elevation of Viewpoint Position (NAD83): **3835(approx.)**  
 Height of Camera Above Ground (ft): **5.4**  
 Date of Photography: **16 February 2012 at 11:41 a.m.**  
 Orientation of View: **S**

**NOTES:**  
 Viewpoint locations have been obtained using handheld GPS coordinates.  
 No part of this photosimulation shall be altered in any way.  
 Placement of Substation is based on preliminary, non-survey controlled camera alignment and therefore indicative only.

-  Viewpoint Location
-  Substation Location

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Michael Clayton & Associates

Latitude: 35° 6' 30.0" N Longitude: 118° 36' 20.53" W

This image presents the **existing view** from **KOP 2**, on **Dale Road**, approximately 0.22 mile west of the proposed substation site. The view is to the east down Dale Road and captures a portion of the predominantly rural agricultural landscape that comprises much of Cummings Valley. The rolling to angular northern foothills of the Tehachapi Mountains provide a backdrop to the flat valley floor. The proposed substation would be located in the open field just beyond the green, planted field.

**KOP 2**  
**Dale Road**  
**Viewing East**

**SCE Banducci Substation Project**  
**MND / Initial Study**  
**Aesthetics**  
**Figure 5.1-6A**

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View from: **Dale Road - Existing Condition**



View from: **Dale Road - Proposed Condition**



Easting Position (SPCS-California Zone 5) : 6380507  
 Northing Position (SPCS-California Zone 5): 2223887.6  
 Elevation of Viewpoint Position (NAD83): 3835(approx.)  
 Height of Camera Above Ground (ft): 5.4  
 Date of Photography: 12 September 2012 at 12:23 p.m.  
 Orientation of View: E

NOTES:  
 Viewpoint locations have been obtained using handheld GPS coordinates.  
 No part of this photosimulation shall be altered in any way.  
 Placement of Substation is based on preliminary, non-survey controlled camera alignment and therefore indicative only.

◀ Viewpoint Location  
 ◻ Substation Location



Source: SCE, 2014.

**Figure 5.1-6B**  
**KOP 2 - View from Dale Road**

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Michael Clayton & Associates

Latitude: 35° 5' 52.10" N Longitude: 118° 36' 7.55" W

This image presents the **existing view** from **KOP 3**, on **Pelliser Road**, approximately 0.2 mile south of the proposed substation site. The view is to the north along Pelliser Road and captures a portion of the predominantly rural agricultural landscape that comprises much of Cummings Valley. The rolling to angular northern extent of the Tehachapi Mountains provides a backdrop to the flat valley floor. The proposed substation would be located in the open field shown in the right-center of the image.

**KOP 3**  
**Pelliser Road**  
**Viewing North**

**SCE Banducci Substation Project**  
**MND / Initial Study**  
**Aesthetics**  
**Figure 5.1-7A**

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View from: **Pelliser Road - South** - Existing Condition



View from: **Pelliser Road - South** - Proposed Condition



Easting Position (SPCS-California Zone 5) : 6381548.1  
 Northing Position (SPCS-California Zone 5): 2222358.5  
 Elevation of Viewpoint Position (NAD83): 3841 (approx.)  
 Height of Camera Above Ground (ft): 5.4  
 Date of Photography: 12 September 2012 at 12:12 p.m.  
 Orientation of View: N

NOTES:  
 Viewpoint locations have been obtained using handheld GPS coordinates.  
 No part of this photosimulation shall be altered in any way.  
 Placement of Substation is based on preliminary, non-survey controlled camera alignment and therefore indicative only.

- Viewpoint Location
- Substation Location



Source: SCE, 2014.

**Figure 5.1-7B**  
**KOP 3 - View from Pelliser Road - South**

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This image presents the **existing view** from **KOP 4**, on **Highline Road**, approximately 0.64 mile northeast of the proposed substation site. The view is to the southwest across agricultural fields south of Highline Road and east of Pelliser Road. The rolling to angular foothills of the Tehachapi Mountains provide a backdrop to the flat valley floor. The proposed substation would be located in front of and to the right of the grouping of trees in the left-center of the image.

**KOP 4**  
**Highline Road**  
**Viewing Southwest**

**SCE Banducci Substation Project**  
**MND / Initial Study**  
**Aesthetics**  
**Figure 5.1-8A**

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View from: **Highline Road - Existing Condition**



View from: **Highline Road - Proposed Condition**

	Easting Position (SPCS-California Zone 5): <b>6383632</b> Northing Position (SPCS-California Zone 5): <b>2226558.1</b> Elevation of Viewpoint Position (NAD83): <b>3851(approx.)</b> Height of Camera Above Ground (ft): <b>5.4</b> Date of Photography: <b>16 February 2012 at 11:27 a.m.</b> Orientation of View: <b>SW</b>
	NOTES: Viewpoint locations have been obtained using handheld GPS coordinates. No part of this photosimulation shall be altered in any way. Placement of Substation is based on preliminary, non-survey controlled camera alignment and therefore indicative only.
Viewpoint Location Substation Location	



Source: SCE, 2014.

**Figure 5.1-8B**  
**KOP 4 - View from Highline Road**

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This image presents the **existing view** from **KOP 5**, on **Pelliser Road**, approximately 0.1 mile north of the proposed substation site. The view is to the south across a corner of an agricultural field, immediately east of Pelliser Road. The rolling to angular foothills of the Tehachapi Mountains provide a backdrop of visual interest in contrast to the flat valley floor. The proposed substation would be located in the immediate foreground, adjacent to and just beyond Dale Road (the light horizontal line in the center of the image above).

**KOP 5**  
**Pelliser Road**  
**Viewing South**

**SCE Banducci Substation Project**  
**MND / Initial Study**  
**Aesthetics**  
**Figure 5.1-9A**

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View from: **Pelliser Road North** - Existing Condition





View from: **Pelliser Road North** - Proposed Condition



Easting Position (SPCS-California Zone 5) : 6381596.6  
 Northing Position (SPCS-California Zone 5): 2224406.6  
 Elevation of Viewpoint Position (NAD83): 3834(approx.)  
 Height of Camera Above Ground (ft): 5.4  
 Date of Photography: 12 September 2012 at 12:54 p.m.  
 Orientation of View: SSE

**NOTES:**  
 Viewpoint locations have been obtained using handheld GPS coordinates.  
 No part of this photosimulation shall be altered in any way.  
 Placement of Substation is based on preliminary, non-survey controlled camera alignment and therefore indicative only.

-  Viewpoint Location
-  Substation Location

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Michael Clayton & Associates

Latitude: 35° 5' 53.41" N Longitude: 118° 35' 44.27" W

This image presents the **existing view** from **KOP 6**, on a residential access road off of and to the west of **Bailey Road**, approximately 0.33 mile southeast of the proposed substation site. This panoramic view is to the northwest across an open agricultural field. Two rural residences are located in the immediate vicinity of this viewpoint. This view across Cummings Valley is back-dropped by a portion of the northern foothills of the Tehachapi Mountains. The proposed substation would be located in the open field in the center of the image above).

**KOP 6**  
**Near Bailey Road**  
**Viewing Northwest**

**SCE Banducci Substation Project**  
**MND / Initial Study**  
**Aesthetics**  
**Figure 5.1-10A**

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View from: **Southeast of Site** - Existing Condition



View from: **Southeast of Site** - Proposed Condition



Easting Position (SPCS-California Zone 5) : 6383495.2  
 Northing Position (SPCS-California Zone 5): 2222571.1  
 Elevation of Viewpoint Position (NAD83): 3871(approx.)  
 Height of Camera Above Ground (ft): 5.4  
 Date of Photography: 12 September 2012 at 1:11 p.m.  
 Orientation of View: NW

NOTES:  
 Viewpoint locations have been obtained using handheld GPS coordinates  
 No part of this photosimulation shall be altered in any way.  
 Placement of Substation is based on preliminary, non-survey controlled camera alignment and therefore indicative only.

Viewpoint Location  
 Substation Location

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