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SECTION ACRONYMS/ABBREVIATIONS

ACRONYM/ ABBREVIATION	DEFINITION
°	Degrees
AADT	Annual average daily traffic
Clatrans	California Department of Transportation
CEC	California Energy Commission
CEQA	California Environmental Quality Act
DPLU	San Diego County Department of Planning and Land Use
F	Fahrenheit
FHA	Federal Highway Administration
kV	kilovolt
KOPs	key observation points
MUP	Major Use Permit
Project	Orange Grove Project
SDG&E	San Diego Gas and Electric
SR	State Route

6.13 VISUAL RESOURCES

This section describes visual resources in the Project area including natural and built features. In addition, this section presents an evaluation of the potential effects of the Project on scenic quality, and a discussion of the Projects relationship to federal, state, and local regulations and polices pertaining to the protection of visual quality.

6.13.1 Methodology

California Energy Commission (CEC) and San Diego County Department of Planning and Land Use (DPLU) staffs were consulted in the development of this visual resources analysis. CEC staff met with TRC at the Site in May 2007 to make observations in the view shed that will be affected, and to identify potential sensitive viewers. Aerial photographs and topographic maps were reviewed, and information was gathered from various agency websites.

Appendix 6.13-A - Aesthetic Viewshed Study, contains a detailed analysis including systematic documentation of the regional and local landscape setting, visual character of the Project site, an evaluation of visual changes associated with the Project, and elements incorporated into the Project design to reduce visual impacts. A set of photographs showing representative public views of the Project area is included in the Aesthetic Viewshed Study.

6.13.2 Existing Visual Setting

The Project is located in unincorporated San Diego County, approximately 4 (road) miles east of Interstate 15 and two miles west of the community of Pala (Figure 2.2-2). The power plant site is situated approximately 5 miles west of Cleveland National Forest, north of State Route 76 (SR 76) and the San Luis Rey River, east of Monserate Mountain and Rice Canyon, and approximately 5 miles south of Riverside County. The region is primarily rural, including agriculture, large plot residential, small communities, open space, and large-scale commercial/industrial facilities.

6.13.2.1 Landscape Character

The Project area's landscape character is defined by features occurring naturally in the landscape and features that have been introduced into the landscape. The naturally occurring landscape features in the Project area include the San Luis Rey River valley and the surrounding hills. In addition to these natural features are areas of extensive disturbance and development throughout the valley including agricultural, commercial, residential, and industrial areas. The surrounding hills, in contrast, have undergone less development that is primarily in the form isolated residential development (single-family residences), roads and electrical transmission lines along some of the ridgelines. Man-made features located throughout the landscape include roads, transmission and distribution line structures and farm structures.

The following figures present a series of photographs that show examples of the Project area's landscape character, both natural and man-made. These photographs were taken along SR 76 that follows along the valley floor.

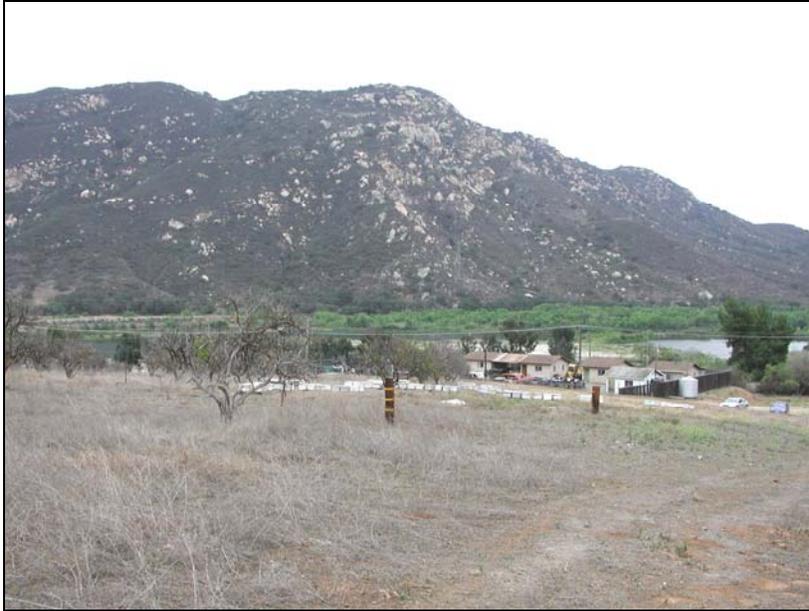


Figure 6.13-1 – View of San Luis Rey River Valley
(North facing hills in the background. The Site is in the foreground).



Figure 6.13-2 – View of eastern exposure hills in the Project area.
(The Site is to the right of the dark-colored fence enclosure, i.e., SDG&E storage area).



Figure 6.13-3 – View of utility lines along SR 76 and Pala Substation
(Substation wall is southwest of Site).



Figure 6.13-4 – View of Pala Casino Spa Resort
(Approximately 1.5 miles east of Site off SR 76).



Figure 6.13-5 – View of Lands Under Agricultural Production
(A fruit stand off SR 76 near Coulter Canyon Road approximately 1.5 miles west of Site).



Figure 6.13-6 – View of former dairy farm off SR 76
(Approximately 1 mile southwest of Site).



Figure 6.13-7 – View of pastoral lands along SR 76
(Near SR 76 crossing of Gomez Creek approximately 0.7 mile east of Site).



Figure 6.13-8 – View of Zalinda Farms Nursery
(Approximately 0.3 mile east of Site off SR 76).



Figure 6.13-9 – View of abandoned residential building on SR 76
(Approximately 1.2 miles southwest of Site).

6.13.3 Project Appearance

The Project Site and Project linear facilities are shown in Figure 2.2-2. Project linear facilities include an electric transmission interconnection (underground), gas pipeline lateral (underground) and water supply (underground). Site features are shown in Figures 2.2-3 and 2.2-4. The power plant will occur on an approximately 8.5 acre Site located within a 202-acre parcel owned by San Diego Gas and Electric (SDG&E). The power plant will be accessed by a primary driveway, located on Pala Del Norte Road. A secondary driveway from SR 76 will be provided for safety. The power plant facilities will be enclosed within an 8-foot tall metal fabric security fence with barbed wire or razor wire on top. Landscaping is proposed for three sides of the Site. In addition, the Project will replace disturbed landscape consisting of non-native grass and orchards with planting of native trees, shrubs and grasses in areas that are disturbed during construction but not needed for operations. The Project will result in a net gain of approximately 10 acres of native plants and habitat (see Section 6.6 – Biological Resources).

6.13.3.1 Power Plant

Figure 2.2-8 provides a landscaping plan. The dimensions of the major Project facilities are identified in Table 3 in Appendix A – Aesthetic Viewshed Study. The most visually dominant of these facilities are the two stacks, each approximately 13 feet in diameter and approximately 80 feet in height. The stacks will be painted a color similar to the dominant color on the hillsides surrounding the Site. The dominant color on the surrounding hillsides is the taupe tone of the dried herbaceous vegetation.

Visible steam plumes are not anticipated at the turbine stacks because the exhaust temperature is expected to be above 600 °F and the relatively low water content in the exhaust. The air inlet

package cooling tower is also not expected to produce any visible water vapor plume. This system is used to pre-cool the inlet combustion air to the turbine during those hot summer days to maintain turbine performance. The air is cooled with chilled water circulating in coils. The chilled water picks up the heat from the air and releases the heat in a cooling tower. The temperature is not expected to get very high for the cooling water (unlike heat rejection from a steam condenser) and the ambient temperature is likely to be greater than 60 °F when cooling may be required; therefore, a visible steam plume is not anticipated or expected to be significant in size.

The exterior lighting systems will consist of surface-mounted fixtures on various plant components, equipment, or modules and pole-mounted lighting at various locations to facilitate maintenance, safe navigation within the plant, and site security. Exterior lighting will use downward directed high-pressure sodium lamps. Lighting contactors and photocells will be used to control exterior lighting. Timers will be included if needed to mitigate exterior lighting during overnight hours in accordance with County requirements. The exterior lighting plan will be subject to review and approval by DPLU.

To minimize sources for potential glare at the Site, major structures will be finished with a non-reflective treatment.

6.13.3.2 Water and Natural Gas Pipelines and Electrical Transmission Line

The proposed water pipeline, natural gas pipeline, and electrical transmission line will be buried and the surface conditions restored. The natural gas pipeline will be routed from the Site south to SR 76, then west along SR 76 to an existing regional gas transmission line. The water pipeline will be routed from the Site northwest to Pala de Norte Road, and then extend generally northward along Pala de Norte Road to an existing water main. These underground pipelines will be located within the road and shoulders. The corridor for the underground electrical transmission line interconnection from the Site to the Pala Substation will be installed in disturbed and developed areas.

6.13.4 Effects of the Project and Significance Criteria

The determination of the significance of visual changes resulting from the Project is based on the Project's overall effect on visual resources. To evaluate the effects representative key observation points (KOPs) were selected in consultation with CEC staff. To determine the significance of the anticipated visual changes, the Project's effects were evaluated according to the California Environmental Quality Act (CEQA) Guidelines. Appendix G of the CEQA Guidelines indicates that a project may have a significant effect on the environment if it will:

- Have a substantial, adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or

- Create a new source of substantial light or glare, which will adversely affect day or nighttime views in the area.

Because the Project would not be located within a State scenic right-of-way, no impact to scenic resources would occur through Project implementation.

In applying these criteria to determine significance, a variety of factors were considered, including:

- The extent of project visibility from residential areas, public open space, or designated scenic routes;
- The degree to which the various Project elements will contrast with or be integrated into the existing landscape;
- The extent of change in the landscape's composition and character; and
- The number and sensitivity of viewers.

Conflict with local goals, policies or designations regarding visual resources may also constitute a significant effect.

6.13.4.1 Scenic Vista

The threshold of significance for a substantial adverse effect on a scenic vista is a physical change to the landscape that alters a recognized scenic vista or area of unique or outstanding visual character. The Site is situated on gently sloping terrain located at the base of a hill. The Project will not obstruct or substantially affect a scenic vista because the power plant will not substantially alter views of the hillsides and ridgelines that are currently experienced by the general public. The few single-family residences that will be able to see the power plant currently have views of other man-made features and disturbed areas including the former gravel quarry, SDG&E substation and storage area, electrical transmission lines, and agricultural lands. Considering these factors, the Project will have a less than significant impact on scenic vistas.

6.13.4.2 State Scenic Highway Resources

There are no designated or eligible federal, state, or county scenic highways or roadways within the project viewshed. Therefore, there is no impact.

6.13.4.3 Visual Character or Quality

The threshold for significance for substantially degrading the existing visual character or quality of the site or its surroundings is a physical change to the landscape that adversely alters the existing visual character or quality of the site and its surroundings. The project involves the installation of a landscaped power plant adjacent to an existing electrical substation, at the site of a former citrus orchard that has not been maintained in at least 5 years and is no longer viable. To the extent the project is visible; it will generally be seen against a hillside backdrop. The major project components will be finished with a non-reflective earth-tone color designed to blend with the backdrop. The Project incorporates the installation of native perimeter landscape

screening, and because it will not be highly visible to the public, the project will not substantially degrade the existing visual character or quality of the project site and its surroundings. With the incorporation of design features related to landscaping, lighting, and equipment painting/surfacing, as described below, impacts will be less than significant.

6.13.4.3.1 Construction

During construction, materials, heavy equipment, trucks, and work crews will be visible at the Site and where linear facilities are being installed. At the Site, there will be grading and construction activities, portable office trailers, equipment laydown and workforce parking. These Construction impacts will be short term and will be most noticeable to motorists traveling along SR 76. Visual effects to motorists as a result of construction will be less than significant because the impacts will be short-term will only affect short segments of SR 76; and because the roadways along the routes for the linear facilities are not scenic routes.

Other than motorists on SR 76, few individuals will be able to see the construction activities. The topography effectively limits the viewshed. Construction of the power plant or linear facilities will be visible from a few rural homes but the views will be distant, and the construction term impact will be short term. Considering these factors, impacts of construction will be less than significant.

6.13.4.3.2 Operations and Maintenance

Power plant facilities will be visible from the few surrounding single family residences. Five single family residences have been identified that may be able to see power plant facilities. Three are located on the hillside approximately 0.3 to 0.6 mile northwest of the Site, and two are located across the valley approximately 0.6 miles southeast of the Site. The Project landscaping with native plants will reduce impacts to views over the long-term. Appendix 6.13-A includes a photo-simulation of the power plant from the residence that appears to have the most unobstructed view of site facilities.

Under existing conditions, the views toward the Site from these residences include prominent man-made features including a large mining area, greenhouses and agricultural activity, an electric substation, and the died-out orchard that the Site will be located on. Furthermore, all or most of these residences will have some screening from vegetation or topography. Considering the current level of anthropogenic activity in the viewshed, the distal character of the views, Project landscaping and other measures included in the Project design, the impact on views from these single family residences will be less than significant (See Appendix 6.13-A).

The impact to motorists along SR 76 also will be less than significant, due in part to the short time that the motorists will be able to see the Site. It is expected that motorists may notice the power plant along an approximately 0.25 mile long segment of SR 76. A photo-simulation of the power plant from SR 76 is provided in Appendix 6.13-A. SR 76 is not a scenic route. Existing conditions include a substation, agriculture, a former mining area, and other developments. Considering these factors, the impact of the power plant on visual effects to motorists will be less than significant.

Because of intervening landform, Project facilities will not be visible to recreational users in Agua Tibia Wilderness located in Cleveland National Forest, Wilderness Gardens Preserve, Mission San Antonio de Pala or the proposed San Luis Rey River regional park. Portions of these recreational areas are within 5 miles of the Site. There are no established regional trails within 5 miles of the Site.

6.13.4.4 Light or Glare

The project will not create a new source of substantial light that could adversely affect nighttime views in the area because project lighting will be directed on-site and will utilize non-glare bulbs. Furthermore, Landscaping, once established, will largely screen facility lighting from SR 76. New structures will be treated with a non-reflective finish; consequently, the project will not create a new source of substantial glare. Lighting contactors and photocells will be used to control exterior lighting. Timers will be included if needed to mitigate exterior lighting during overnight hours in accordance with County requirements. The exterior lighting plan will be subject to review and approval by DPLU.

6.13.5 Laws, Ordinances, Regulations and Standards

The Site is within the jurisdiction of San Diego County. The County of San Diego Zoning Ordinance outlines regulations for land use in unincorporated areas of the county. Zoning ordinances related to aesthetics are identified in Section 6.9 - Land Use, and Appendix 6.9-A - Zoning Ordinances Summary. In summary, the Site is located on land zoned General Agriculture and a power generation facility (designated as a Civic Use Type under the zoning ordinance) is an allowable use with issuance of a Major Use Permit (MUP). With a MUP, the Project will be consistent with applicable land use plans, policies, goals and regulations as described in Section 6.9.

6.13.6 Cumulative Impacts

As described in section 6.9 (Land Use) the dominant land use designations in the Project vicinity are agriculture and open space. Existing industrial/utility uses within 1.0 mile of the Project site include a former aggregate quarry to the south and the existing Pala Substation. Several single-family homes are scattered in the vicinity. All of these features and other infrastructure are part of the existing visual experience in the vicinity.

Section 6.1.2 identifies other potential actions being considered in the area that may have potential for cumulative impacts to visual resources. The Site is surrounded by topography that blocks views except from the proximal area. Of the projects identified in Section 6.1.2 and shown in Figure 6.1-1, projects with potential for cumulative impacts to visual resources are the Warner Ranch project, and the Gregory Canyon landfill project. These projects, if constructed, will have cumulative impacts with the Orange Grove Project to the extent that more than one of these projects is within the field of view for any receptor. There are few sensitive receptors (e.g., residences) in the area that would see views of more than one of these projects. Furthermore, the cumulative impact for travelers on SR 76 would be slight because there would only be short

opportunities at the speed of travel to see more than one of these projects at any time. Furthermore, the Orange Grove Project will occur in disturbed landscape consisting of developed area, non-native grass and orchards, and the Project will include planting of native trees, shrubs and grasses in areas that are disturbed during construction but not needed for operations. As detailed in Section 6.6 – Biological Resources, the Project will result in a net gain of approximately 10 acres of native plants and habitat that will reduce the overall manmade landscape appearance and help to offset Project impacts. Considering these factors, the cumulative impact on visual resources will be a less than significant.

6.13.7 Mitigation Measures

The Project incorporates design features, including perimeter landscaping on three sides of the power plant and painting of major equipment and facilities to blend in with the adjacent hillsides. Additionally, night lighting will be used for safety and security purposes and includes hooded and low pressure sodium lamps. With implementation of these measures, this analysis has documented that no significant visual impacts will occur as a result of the project. Therefore no additional mitigation measures are proposed.

6.13.8 References

References are included in Appendix 6.13-A – Aesthetic Viewshed Study.

6.13-A. B

APPENDIX 6.13-A – AESTHETIC VIEWSHED STUDY

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APPENDIX 6.13-A - AESTHETIC VIEWSHED STUDY

1.0 Introduction

The purpose of this study is to document the existing visual resources in the Orange Grove Project (Project) area and to assess the visual impacts that could occur as a result of development the Project. A summary of the public laws, ordinances, regulations, and standards pertaining to visual quality in the Project vicinity is also provided.

As described in Section 2.0 – Project and Facility Description, the Project involves siting, constructing, and operating a power plant on land that was most recently in use as a citrus orchard. The Project is located in unincorporated San Diego County, California, north of SR 76 about two miles west of the community of Pala.

The Figures referenced in this Study are provided in Appendix 6.13-B.

2.0 Methodology

This analysis of Project visual impacts is based on: (1) Site and Project area field reconnaissance; (2) review of relevant data including Project maps and drawings, aerial and ground-level photographs, and local planning documents; and (3) computer modeling to create photo-simulations of the power plant's appearance and affect. Field observations were conducted in May 2007 to document existing visual conditions in the Project area and to identify potentially affected sensitive viewing locations.

This visual study included are systematic documentation of the regional and local landscape setting, visual character of the Site, an evaluation of visual changes associated with the Project, and elements incorporated into the Project design to reduce visual impacts. An inventory of existing visual conditions was prepared to characterize the affected environment in terms of its visual character, quality, and location of potentially sensitive viewpoints. A set of photographs showing representative public views of the Project area is provided in Section 6.13.

Three Key Observation Points (KOPs) were identified in consultation with CEC staff to represent views of the Project area by the public. To document the proposed visual change, computer photo-simulations were generated to show what the Project is expected to look like from the three KOPs. The visual simulations are presented as existing views (e.g. before) and visual simulation (e.g. after) images from these KOPs. The visual impact assessment was based, in part, on evaluating the “after” views provided by the computer-generated visual simulations and comparing them to the existing visual environment.

2.1 Regional and Local Landscape Setting

The Site is located in unincorporated San Diego County, approximately 4 (road) miles east of Interstate 15 and two miles west of the community of Pala (Figure 6.13-10). The Project site is

situated approximately 5 miles west of Cleveland National Forest, north of State Route 76 (SR 76) and the San Luis Rey River, east of Monserate Mountain and Rice Canyon, and approximately 5 miles south of Riverside County. The region is primarily rural, including agriculture, large plot residential, small communities, open space, and large-scale commercial/industrial facilities including the Pala Casino Resort Spa located in the Pala Indian Reservation.

The Project area (a zone within approximately 0.5 mile of the Project site) is characterized by mix of both natural and man-made elements (Figure 6.13-11). Steep hillsides, which are vegetated with native coastal sage scrub and chaparral habitat, lie to the west, north, and east. To the south, most of the area is occupied by a former gravel mine in the San Luis Rey River bed, where ponds have formed where gravel pits extended below the water table. Where vegetation is present in the mining area and river bed, it is mostly described as southern willow riparian forest habitat. Vegetation along SR 76 is variable (both native and non-native) and is often comprised of linear plantings immediately adjacent to the roadway including eucalyptus trees, oleander, prickly pear cactus, and California pepper trees. Disturbed and developed areas proximal to the Site include the Pala de Norte Road, SR 76, a fenced storage yard, the Pala electric substation, and the former citrus grove that occupies the site and adjacent land to the south and east. Single family residences are located approximately 0.3, 0.5, and 0.60-mile northeast and approximately 0.5-mile southeast of the Site. Both 69 kilovolt (kV) and 230 kV transmission lines are located along a ridgeline east of the Site. The 230 kV transmission line runs generally north-south, and the 69 kV transmission line extends generally northward to SR 76 and turns westward and runs along SR 76 past the Site and the Pala substation and onward toward I-15.

2.2 Visual Character of the Project Site

The Site comprises approximately 8.5 acres that occupies about half of a former orchard area. The former orchard extends to both sides of the drainage east of the Site. It has not been maintained in at least five years and, due to the dry climate, now appears as mostly dead wood. The Site is situated on an old alluvial fan surface that slopes southward towards SR 76 at an approximately 10 percent grade. This alluvial fan is located between two normally dry upland drainages that are slightly to moderately incised into the alluvial fan surface. Both of these drainages are extensively disturbed with land-clearing and orchard debris. The western drainage is lined with scattered remnants of coastal sage scrub vegetation and the eastern drainage is lined with open riparian woodland vegetation. Pala de Norte Road, a paved private road, borders the site to the west and leads to residences located in the hills to the northeast of the Site.

Three linear corridors are proposed for the underground installations of natural gas and water pipelines and an electrical line. The natural gas pipeline will be routed from the Site south to SR 76, then west along SR 76 to an existing regional gas transmission line just east of Rice Canyon Road. The water pipeline will be routed from the Site northwest to Pala de Norte Road, and then along Pala de Norte Road to an existing water main. These underground pipelines will be located within the road and shoulders. Areas adjacent to these roads consist of coastal sage scrub, southern willow riparian forest, agriculture, and developed areas. The corridor for the underground electrical transmission line interconnection will extend southwest from the Site to

the Pala substation. The electrical transmission line will be installed in disturbed and developed areas.

2.3 Project Viewshed and Potentially Affected Public View Corridors

The Project viewshed, defined as the area from which the new power plant will be potentially visible, encompasses areas to the north, east, south and west. There are no receptors to the west, and the private Pala Del Norte Road is the only identified receptor location identified to the north. The surrounding topography effectively precludes views of the site, except for views from relatively close to the Site. The primary receptors will be those rural areas including a few single family residences travelers on SR 76, and upper floors of the Pala Resort and Casino hotel.

Visual details generally become more apparent to the viewer as the scene becomes more foreground. For the purposes of the visual analysis, the foreground viewshed is considered to be the primary potentially affected area and is the focus of the detailed analysis. In addition, sensitive resource areas (recreational facilities and historic sites) extending from the foreground zone up to approximately five miles from the Project site, where change could be noticeable, are addressed. Although the Pala Casino Spa Resort is outside of the foreground view distance and it is a commercial facility and not a recreational facility, it is also addressed in this analysis because the Site is visible from some of the rooms on the upper floors of the hotel.

From much of the Project viewshed, it is anticipated that the views of the Project facilities will be partially or fully screened by existing vegetation and landform. Figure 6.13-12 shows the location of three KOPs used to simulate the visual impact of the project. These KOPs generally represent the three locations with the most prominent views of the power plant: (1) eastbound motorists on SR 76 approaching the Site; (2) westbound travelers on SR 76 approaching the Site; and (3) a representative view from one of the three houses on the ridgeline northeast of the Site. Figure 6.13-13 through 6.13-15 present 3 photographs taken from these representative viewpoints documenting existing visual conditions. Figure 6.13-16 shows the location of recreational areas and historical sites within approximately 5 miles of the project site. There are no existing or proposed regional trails within 5 miles of the Site. There are also no scenic routes or roadways with views of the Site.

2.4 View from the South (Figure 6.13-13, KOP 1)

2.4.1 KOP 1

KOP 1 is taken from the intersection of SR 76 and Pala de Norte Road approximately 700-feet from Site boundary. This view looks northeast across SR 76 at the storage facility that is on the southwest corner of the Project site. This photograph shows the steep hillsides to the north and east of the Project site that are vegetated with native coastal sage scrub and chaparral habitat.

2.4.2 Recreational Areas

The San Luis Rey River, located south of the Site, flows from Palomar Mountain in Cleveland National Forest to the city of Oceanside, where it empties into the Pacific Ocean. The County of

San Diego has been embarking on a project to develop a regional park along the San Luis Rey River. The proposed regional park would stretch approximately nine miles, parallel to State Route 76, along the San Luis Rey River from Oceanside to the area surrounding Interstate 15. The easterly boundary of this park is approximately 4 miles west of the Project site. As envisioned, the park would provide recreational opportunities while preserving the San Luis Rey River and surrounding lands. The county has completed the Draft Master Plan document and is now beginning the environmental review process. Because of its distance from the Project site and intervening landforms and vegetation, the Project site would not be visible from this proposed regional park.

2.5 View from the East (Figure 6.13-14, KOP 2)

KOP 2 is taken from SR 76 approximately 500 feet east of the Site. This view looks west across SR 76 from a private driveway. The citrus orchard where the Site is located can be seen across the roadway, along with the steep hillsides west of the Site that are vegetated with coastal sage scrub and chaparral habitat.

2.5.1 Recreational Areas and Historical Sites

Wilderness Gardens Preserve, a county park, is located approximately 11 miles east of I 15 off SR 76. This 690 acre preserve contains nature trails that traverse oak woodland and riparian habitats. This day use only preserve also has picnicking facilities. Because of its distance from the Project site and intervening landforms and vegetation, the Project site is not visible from the preserve.

San Antonio de Pala Asistencia is located along Pala Mission Road (just north of SR 76) in Pala approximately 1.5 miles east of the Site. This historical site was a sub-mission of Mission San Luis Rey de Francia. It was established in 1816 and is the only surviving Asistencia in the mission system and the only mission-related structure still ministering to an Indian population. San Antonio de Pala Asistencia is notable for its bell tower or campanile and is open to the public. Because of its distance from the Project site and intervening buildings, landforms and vegetation, the Project will not be visible from San Antonio de Pala Asistencia.

The Pala Rey Camp property is a commercial/multiple use property located approximately 0.5-mile southeast from the Site and is rented out to private users for, among other uses, retreat congregations during the summer months. This facility is located on private property and access was not obtained to determine visibility of the Site but it is anticipated that portions of power plant facilities will be visible where breaks occur in intervening existing vegetation and proposed landscaping.

2.5.2 Pala Casino Resort Spa

The Pala Casino Resort Spa is located in the Pala Indian Reservation approximately 1.5 miles east of the Site off SR 76. This resort includes gaming facilities, approximately 500 hotel rooms and suites, and eight restaurants. The rooms/suites on the upper floors of the hotel that face towards the Site will have views of the power plant over intervening buildings, landforms and

vegetation that shelter the plant from view from the ground level in the Pala area. The Project site is not visible from the restaurants, gaming areas, outdoor recreation areas (pool and event lawn), or outdoor terrace.

2.6 View from the North (Figure 6.13-15, KOP 3)

Public access north of the site is prohibited due to posted no trespassing signs on Pala de Norte Road and other unnamed private roads. Because of the access restrictions, there is no public access point northeast of the Site where the power plant could be viewed. However, there are three single-family residences on the slopes northeast of the Site that will be able to see portions of the power plant. KOP 3 is a representative photograph of the view toward the Site from the northeast, taken from an unnamed private roadway (approximately 0.5- mile northwest of the Site) to represent views from the houses in this area. The angle of the view was selected to be worst-case clear line-of-sight and landscaping or other features at the houses may substantially screen views of the Site compared to the view shown. The orchard that encompasses the Site footprint is visible in the middleground, and the SDG&E storage facility and Pala substation can be seen in the middleground behind the Site location. The former aggregate quarry dominates the view of the riverbed area can also be seen to the left of SR 76.

2.6.1 Recreational Areas

Agua Tibia Wilderness area in the Cleveland National Forest is located approximately 5 miles northeast of the Project site. This 15,934-acre area is mountainous and cut by many deep canyons containing only intermittent streams. Vegetation is mostly chaparral with oak woodlands and some coniferous forests at higher elevations. Agua Tibia Wilderness has 25 miles of trail. Because of its distance from the Site and intervening landforms, the Site is not visible from Agua Tibia Wilderness.

2.7 Views from the West

Public access with views from west of the Site is limited to several hundred feet along the private Pala de Norte Road. Just northwest of the Site a gate and no trespassing signs are posted for this private roadway. Due to limited public access along this roadway and because KOP 1 (Figure 6.13-13) is in close proximity to Pala de Norte Road (off SR 76), additional photographs from Pala de Norte Road aren't included in this study.

2.7.1 Recreational Areas

There are two public golf courses located within 5 miles of the Site. Pala Mesa Resort Golf Course is approximately 2.7 from the Site and Fallbrook Golf and Country Club is approximately 4.3 miles. Both golf courses are west of I 15 and do not have views of the Project site due to distance and intervening landforms.

3.0 LAWS, ORDINANCES, REGULATIONS AND STANDARDS

The Site is within the jurisdiction of San Diego County. The County of San Diego Zoning Ordinance outlines regulations for land use in unincorporated areas of the county. Zoning ordinances related to aesthetics are identified in the Section 6.9- Land Use, and Appendix 6.9-A: Zoning Ordinance Summary. The Site is located on land zoned General Agriculture. A power generation facility is designated as a Civic Use Type in the zoning ordinances and is an allowable use for Site lands with a Major Use Permit (MUP). With a MUP issued by the County, the Project will be consistent with applicable land use plans, policies, goals and regulations.

3.1 San Diego County General Plan

The San Diego County General Plan is comprised of several elements including Conservation, Housing, Open Space, Regional Land Use Element, and Recreation that contain specific objectives and policies. With the exception of the Scenic Highway Element and the Conservation Element as discussed below, the elements of the San Diego General Plan do not contain relevant visual policies. Community plans for the unincorporated areas of the County sometimes do contain applicable policies, however in reviewing the Pala/Pauma Subregional Plan no relevant visual policies were found.

3.1.1 Scenic Highway Element

The Scenic Highway Element in the San Diego County General Plan establishes a Scenic Highway Program with the purpose of protecting and enhancing the County's scenic, historic, and recreational resources within a network of scenic highway corridors.

The Scenic Highway Element contains a map of scenic highways and byways and a priority list. The map indicates those routes for which scenic highway corridors, official designation, and protection measures are to be established. The priority list describes each route within the Scenic Highway System and designates the route's priority for which scenic corridor planning and implementation are to be initiated as First, Second, and Third Priority scenic routes. The County is in the process of revising the San Diego County General plan, and as a result, the Priority Scenic Routes identified on the aforementioned map and priority list are subject to change. The Project site is located along SR 76 between I-15 and the Pala Indian Reservation. This stretch of SR 76 is not a listed or priority scenic route in the Scenic Highway Element.

3.1.2 Conservation Element

The purpose of the Conservation Element in the San Diego County General Plan is to identify and describe the natural resources of the County and prepare policies and action programs to conserve these resources. The Site falls within one of the Resource Conservation Areas described in the Conservation Element and this is the Astronomical Dark Sky area associated with Palomar Observatory. The County recognizes that it is not reasonable or possible to "turn the lights out" or provide a totally dark sky simply to further astronomical research, but they state that all efforts should be made to minimize this light pollution.

Policies and action programs identified in this Conservation Element that relate to the Project are as follows:

- The County of San Diego will act to minimize the impact of development on the useful life of the observatories.
- Amend appropriate ordinances to control sources of light that adversely affect Palomar and Mount Laguna Observatories.

In design of lighting for the Site, the Project will comply with County zoning ordinances unless other conditions are required under the Project's Major Use Permit.

3.2 National Scenic Byways Program

The National Scenic Byways Program is administered through the Federal Highway Administration (FHA) to recognize, protect, and promote America's most outstanding roads. National Scenic Byways designations recognize roads across the country that provides a unique travel experience. There are no national scenic byways in San Diego County.

3.3 California Department of Transportation

The California Scenic Highway Program was created by the Legislature in 1963. The purpose of the program is to preserve and protect scenic highway corridors from changes that will diminish the aesthetic value of lands adjacent to highways. The State Scenic Highway System includes highways that are either eligible for designation as scenic highways or have been designated as such. The status of a state scenic highway changes from "eligible" to "officially designated" when the local jurisdiction adopts a scenic corridor protection program, applies to the California Department of Transportation (CalTrans) for scenic highway approval, and receives designation from CalTrans. A city or county may propose adding routes with outstanding scenic elements to the list of eligible highways, however, state legislation is required. There are four officially designated state scenic highways in San Diego (SR-75, SR-78, SR-163 and SR-125). The Project site is not visible from any of these corridors.

4.0 Impact Evaluation

4.1.1 Construction Impacts

4.1.1.1 Plant

Temporary construction-related visual impacts will result from the presence of construction materials, heavy equipment, trucks, portable office trailers, parked vehicles and work crews at the Site. Additionally, visual impacts related to vegetation clearing and grading at the Site and Project access driveways will result during construction. Construction activities would occur during an approximate six month period from January until June 2008.

Three single family residences located on the hillsides northwest of the Site, and two residences southeast of the Site on the opposite side of the valley will be able to see the construction

activities taking place on the Site. Distance to the site from these houses is 0.3 to 0.6 miles, so views will not be in the foreground. Furthermore, at least some of these residences will have partial screening from vegetation and topography. Considering these factors and the low number of receptors and short term of construction impacts, Site construction impacts to visual resources from these homes will be less than significant. Additionally motorists along SR 76 will have views of construction of the power plant. Motorists' exposure to construction activities will be for a temporary duration and limited to an area along SR 76 that is approximately 0.25 mile long. Considering these factors and considering that SR 76 is not a scenic route, Visual effects to motorists as a result of Site construction will be less than significant.

4.1.1.2 Transmission Line Interconnection, Water Pipeline and Gas Pipeline

Construction of the water and gas pipeline laterals each will take approximately one month. Visual impacts associated with the construction workspace include removal of paved surfaces, trenching activities, stringing of pipe along the pipeline route in advance of the moving area of installation;; welding and radiographic inspection; lowering the pipe into the trench and backfilling of the trench.

Construction-related visual impacts will result from the presence of equipment, materials, excavated piles of dirt and pavement, and construction personnel along the routes for these linear facilities. Visual effects will be less than significant because the impacts will be temporary and short-term, and the roadways along the routes for these linear facilities are not scenic routes.

Construction of the transmission line interconnection and improvements at the Pala substation will occur adjacent to the Site. Impacts will be similar to those described for Site construction in Section 4.1.1.1, except that term of construction for these facilities will be shorter (i.e., less than a month). The visual impact of these construction activities will be less than significant for the reasons identified for Site construction impacts in Section 4.1.1.1.

4.1.2 Operation Impacts

Project linear facilities will be underground and will not impact visual resources during the operational life of the Project. The power plant will have facilities that within view of the public.

Major power plant facilities and equipment are described in Section 2.0 – Project and Facility Description. Site grading, access, and major plant equipment listed in Table 1 are the major features that will control the visual affects of Site development. The most visually dominant power plant equipment will be the two stacks, each approximately 13 feet in diameter and approximately 80 feet in height. The stacks will be painted a color similar to dominant color on the hillsides to the west of the Project site. The dominant color on the surrounding hillsides is the taupe tones of the dried herbaceous vegetation.

Table 1 – Major Equipment

EQUIPMENT	HEIGHT (FEET)	LENGTH OR DIAMETER (FEET)	WIDTH (FEET)	MATERIAL TYPE
Combustion Turbine Generator Skid Enclosures (2)	49	63	50	Various
Emission Control System -SCR (2)	30	54	20	Carbon & Stainless Steel
Stacks (2)	80	13	- - -	Carbon & Stainless Steel
Aqueous Ammonia Storage Tank (1)	- - -	10	17	Stainless Steel
Chiller System w/ Enclosure (1)	43	64	20	Various
Fuel Gas Compressors (3)	14	29	15	Various
Demineralized Water Treatment System (2, trailer mounted)	14	32	8	Carbon & Stainless Steel
Demineralized Water Storage Tank (1)	28	25	- - -	Stainless Steel
Raw Water/Firewater Storage Tank (1)	40	40	- - -	Carbon Steel
Wastewater Storage Tank	21	18	- - -	Carbon Steel
Generator Step-Up (GSU) Transformer	19	18	11	Steel / Copper
Switchyard Structures & Bus (2)	19	0.5	0.5	Steel / Copper
CTG Switchgear (2)	8	12	8	Steel / Copper
CTG Auxiliary Skid (2)	13	50	14	Various
CTG Fin-Fan Cooler (2)	15	16	13	Various
Plant Electrical Switchgear (2)	8	30	8	Steel / Copper
Blackstart Generator (1)	10	31	8	Various

Figures 6.13-17 through 6.13-25 present photographic visual simulations from the three KOPs that depict the expected appearance of the power plant and Project landscaping as it will appear immediately after construction completion, 10 years after construction completion, and 20 years after construction completion, as requested by CEC staff.

In order to evaluate the potential visual impact of the Project from the KOPs, first the existing scenic quality was evaluated. Scenic quality is a measure of the visual appeal of a tract of land. In this evaluation, lands are given a 1, 2, or 3 rating based the apparent scenic quality which is determined using seven key factors: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural (man-made) modifications. The results of this evaluation for the views from the three selected KOPs is provided in Table 2, below. These results are incorporated into Table 3, which evaluates existing views of the KOPs in terms of two additional criteria: viewer exposure and viewer sensitivity, expressed in terms of dependent variables in order to evaluate the overall impact. Each variable is rated on a scale of “1” to “3”, with “3” representing a higher impact. The overall sum of the three criteria gives a visual impact score for each viewpoint. The lowest possible score for the visual impact total in Table 3 is “3” and the highest is “9”. A score of 3 to 5 is considered a potentially low impact, a score greater than 5 to 7 is a potentially moderate impact, and a score greater than 7 to 9 is a potentially high impact.

Table 2 – Scenic Quality Evaluation

VIEWER LOCATION NUMBER ¹	SCENIC QUALITY ³								OVERALL SCENIC QUALITY ²
	Landform	Vegetation	Water	Color	Influence of Adjacent Scenery	Scarcity	Cultural (man-made) Modifications	Total	
KOP 1 (South)	2	2	2	2	1	1	-1	9	1
KOP 2 (East)	2	2	2	2	1	1	-1	9	1
KOP 3 (North)	2	3	3	2	3	1	-1	12	2

- (1) See Appendix 6.13-B for location of KOPs.
- (2) Overall Scenic Quality: 3 (A) = 19 or more total; 2 (B) = 12 to 18 total; 1(C) = 11 or less total
- (3) Rating system is based on the scenic quality inventory and evaluation chart included in BLM Manual Handbook 8410-1, Visual Resource Inventory (See Appendix 6.13-C)

Table 3 – Visual Impact Evaluation

VIEWER LOCATION ¹	LAND USE ²	VIEWER EXPOSURE				OVERALL VIEWER EXPOSURE (VD+OP+NV+VO) / 4	VIEWER SENSITIVITY		OVERALL VIEWER SENSITIVITY (VA+DV) / 2	OVERALL SCENIC QUALITY ⁹	VISUAL IMPACT TOTAL (OVERALL VE+VS+SQ)	POTENTIAL VISUAL IMPACT RATING ¹⁰
		View Distance ³	Observer Position ⁴	Number of Viewers ⁵	Visual Obstruction ⁶		Viewer Activity ⁷	Duration of View ⁸				
KOP 1 (South)	RD	3	1	2	3	2.25	1	1	1	1	4.25	low
KOP 2 (East)	RD	3	1	2	3	2.25	1	1	1	1	4.25	low
KOP 3 (North)	RES	2	3	1	3	2.25	2	3	2.5	2	6.75	moderate

- (1) Refer to Table 1: Scenic Quality Evaluation
- (2) RD = Road; RES = Residential
- (3) View Distance: 3 = Foreground; 2 = Middleground; 1 = Background
- (4) Observer Position: 3 = Superior; 2 = Normal; 1 = Inferior
- (5) Number of Viewers: 3 = High; 2 = Moderate; 1 = Low
- (6) Visual Obstructions: 3 = Unobstructed views; 2 = Views over existing buildings and/or vegetation; 1 = Partially obstructed views of seen between buildings or breaks in vegetation or landforms
- (7) Viewer Activity: 3 = Recreation; 2 = Residential; 1 = Traveler on roadway
- (8) Duration of View: 3 = High; 2 = Moderate; 1 = Low
- (9) Scenic Quality: 3 = High; 2 = Moderate; 1 = Low
- (10) Potential Visual Impact Rating: 7 to 9 = High; > 5 to 7 = Moderate; 3 to 5 = Low

In obtaining a MUP, the Project will conform with county public policies regarding aesthetic resources and therefore, public policy conformance was not included in the table. It was also determined that the Project facilities are not within any county or state scenic view corridor so this wasn't a factor in the evaluation.

The “after” views of the Site for KOP 1 illustrate what motorists on SR 76 will see as they get close to the site traveling east. As shown in these simulations, initially after completion of construction, travelers along SR 76 will see the upper portions of power plant structures, with the lower part of the facility screened by low shrubs and the existing storage facility. Over time, the proposed evergreen landscaping (native oaks and shrubs) will provide year round visual screening of most of the Project facilities. Additionally, painting of major equipment a color that will tone in with the hillsides in the background will help to minimize their visibility.

The “after” views of the Site for KOP 2 illustrate what motorists on SR 76 will see as they get close to the site traveling west. As shown in these simulations, initially after completion of construction, travelers along SR 76 will be able to see the upper portions of power plant structures, with the lower part screened by existing oak trees and shrubs east of the Site that will not be disturbed. Over time, the proposed native landscaping (oak trees and shrubs) will provide year round visual screening of most of the Project facilities. Additionally, painting of the stacks a color that will tone in with the hillsides in the background will help to minimize their visibility.

Due to existing landforms along west and east sides of the Site, views to the Project site are limited to a corridor that is approximately 0.25 mile long along SR 76. When traveling at the posted speed limit of 35 miles per hour, the duration of the views to the Project site in both travel directions along this 0.25-mile long corridor will be a very short duration of approximately 0.5 minutes. Annual average daily traffic (AADT) reported by California Department of Transportation for 2006 traffic volumes for this stretch of roadway (located between Junction Route 15 and Pala Mission Road) was 13,400. SR 76 is not a scenic route. Existing conditions include a substation, agriculture, a former mining area, and other developments. Considering these factors, the impact of the power plant on visual effects to motorists will be less than significant.

The “after” views of the Site for KOP 3 represent a conservative, relatively unobstructed view of the Site from slopes to the northeast of the Site where three homes are located. Immediately following construction, there will be a visible area of coastal sage scrub hydroseeding at the project laydown area that temporarily will be apparent due to coloration. Over time, the hydroseeded area will take on a native landscape appearance, and planted landscaping around the site perimeter (native oaks and shrubs) will mature and provide some visual screening that will help to break up the visual form of the plant. However, due to the observer’s higher vantage point, much of the power plant facilities will remain visible. Painting of the major project equipment with a color that will tone in with the hillsides in the background will help to minimize visibility. The approximately 10 acres of abandoned orchard and disturbed non-native grassland that will be replaced with native vegetation and habitat will help to reduce the overall visual impact from the few homes represented by KOP 3, since the planted habitat will be most visible from elevated viewpoints.

As shown in Table 2, the Project will have a potentially moderate visual impact on the surrounding single family residences that overlook the Site. Under existing conditions, the views toward the Site from these residences include prominent man-made features including a large mining area, greenhouses and agricultural activity, an electric substation, and the died-out

orchard that the Site will be located on. Furthermore, all or most of these residences will have some screening from vegetation or topography. Considering the current level of anthropogenic activity in the viewshed, the distal character of the views, Project landscaping and other measures included in the Project design, the impact on views from these single family residences will be less than significant.

For guests of the Pala Casino Resort Spa staying in rooms/suites on the upper floors that face towards the Project site, the power plant will be visible over intervening buildings, landforms and vegetation from a distance of 1.5 miles. Because of the view distance and the fact that the power plant will be backdropped by surrounding hillsides, impacts will be less than significant.

Overall, the power plant will not substantially alter the visual character of the surrounding area as experienced by the public. The Project's modifications to the existing landscape setting will not result in a substantial negative effect for the following reasons:

- The power plant will not obstruct or substantially affect a scenic vista it will not substantially alter views of the hillsides and ridgelines that are currently experienced by the general public traveling along SR 76.
- The power plant will not be visible from a designated state scenic highway.
- The power plant will not substantially degrade the existing visual character or quality of the site and its surroundings. Landscaping will provide visual screening and the Site is not of unique or outstanding visual character or quality as there are a number of other man made facilities in the area including the Pala Substation, 69 kV electric transmission line, former gravel quarry, and SDG&E storage site as well as disturbance from former agricultural activities. To the extent the project is visible from public corridors (i.e. SR 76); it will be seen only for a short duration and will be viewed against a hillside making project facilities less visible. Also, because the Project incorporates native perimeter landscaping, and because it will affect few sensitive receptors (i.e., residences), the project will not substantially degrade the existing visual character or quality of the Site or surroundings.
- Because project lighting will be directed on-site and because landscaping, once mature, will largely screen facility lighting from motorists on SR 76, the project will not create a new source of substantial light that could adversely affect nighttime views in the area. Additionally although single family residences located northeast of the Project will be able to see the fenced facility when lit, the new source of light will not be significant. Exterior lighting will use downward directed high-pressure sodium lamps. Timers will be included if needed to mitigate exterior lighting during overnight hours in accordance with County requirements. Also, new structures will be treated with a non-reflective finish; consequently, the project will not create a new source of substantial glare.

4.1.2.1 Vapor Plumes

Since there is no heat exchange associated with the simple cycle gas turbines, the stack exhaust temperature is expected to be above 600 degrees (°) Fahrenheit (F). At this high temperature and

relatively low moisture content, a visible steam plume is not expected from the two primary turbine exhaust stacks.

The air inlet package cooling tower also is not anticipated to generate a visible plume. The water temperature in the cooling tower get very high, and the ambient temperature will typically be greater than 60 °F when cooling may be required; therefore, a visible steam plume is not anticipated or expected to be significant in size.

4.1.2.2 Light or Glare

The exterior lighting systems will consist of surface-mounted fixtures on various plant components, equipment, or modules and pole-mounted lighting at various locations to facilitate maintenance, safe navigation within the plant, and site security. Some lighting will be provided by equipment manufacturers at doorway entrances to equipment. The taller equipment may be used for area lighting instead of poles. Lighting contactors and photocells will be used to control exterior lighting. Timers will be included if needed to mitigate exterior lighting during overnight hours in accordance with County requirements. Major structures will be painted or finished with a non-reflective treatment. The exterior lighting plan will be subject to review and approval by DPLU.

5.0 REFERENCES

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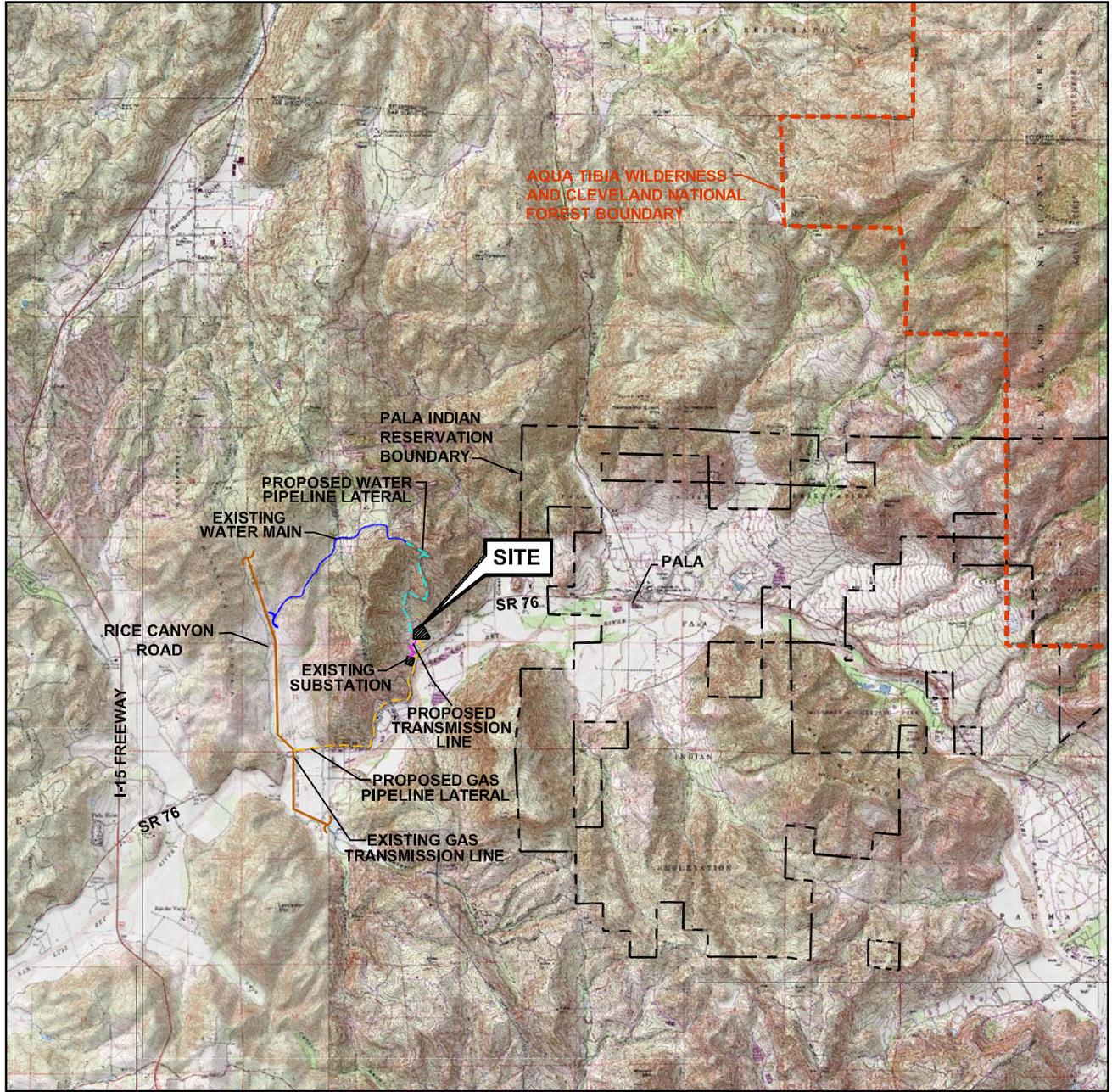
US Department of Transportation, Federal Highway Administration, *Visual Impact Assessment for Highway Projects*, Publication No. FHWA-HI-88-054.

6.13-B. B

APPENDIX 6.13-B – AESTHETIC VIEWSHED STUDY FIGURES

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SOURCE:

United States Geological Survey
7.5 Minute Topographic Map, 2000:
Pala, Bonsall, Temecula,
and Pechanga Quadrangles

0 1 2 3 4 MILES



SCALE 1:96,000



PROJECT: 29031902

FACILITY:

ORANGE GROVE PROJECT
SAN DIEGO COUNTY, CALIFORNIA

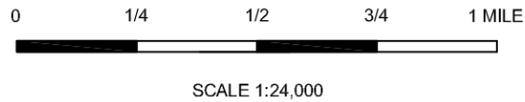
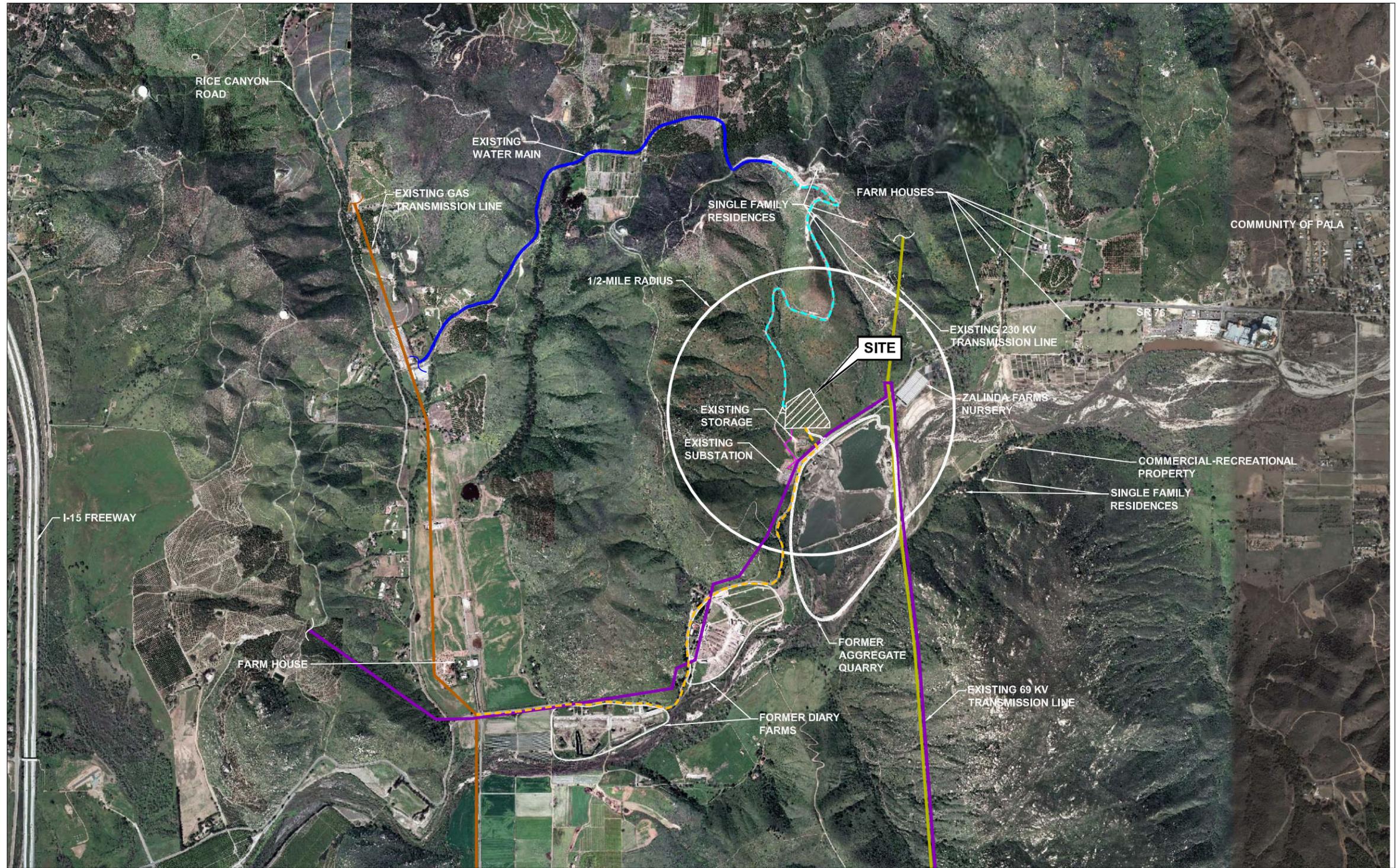
REGIONAL MAP

FIGURE 6.13-10

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LEGEND

- Proposed Electric Transmission Line
- Proposed Gas Pipeline Lateral
- Proposed Water Pipeline Lateral
- Existing Gas Transmission Pipeline
- Existing Water Main



PROJECT: 29031902

FACILITY:

ORANGE GROVE PROJECT
SAN DIEGO COUNTY, CALIFORNIA

PROJECT AREA

FIGURE 6.13-11

SOURCE:

Google Earth Professional, 2005.

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Figure 6.13-12 – KOP Location Map



Project: Orange Grove Project - SPPE Application

Map Source: Google Earth – Coordinates NAD27

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Figure 6.13-13 – KOP 1 Existing Condition



Project: Orange Grove Project - SPPE Application

Figure 6.13-14 – KOP 2 Existing Condition



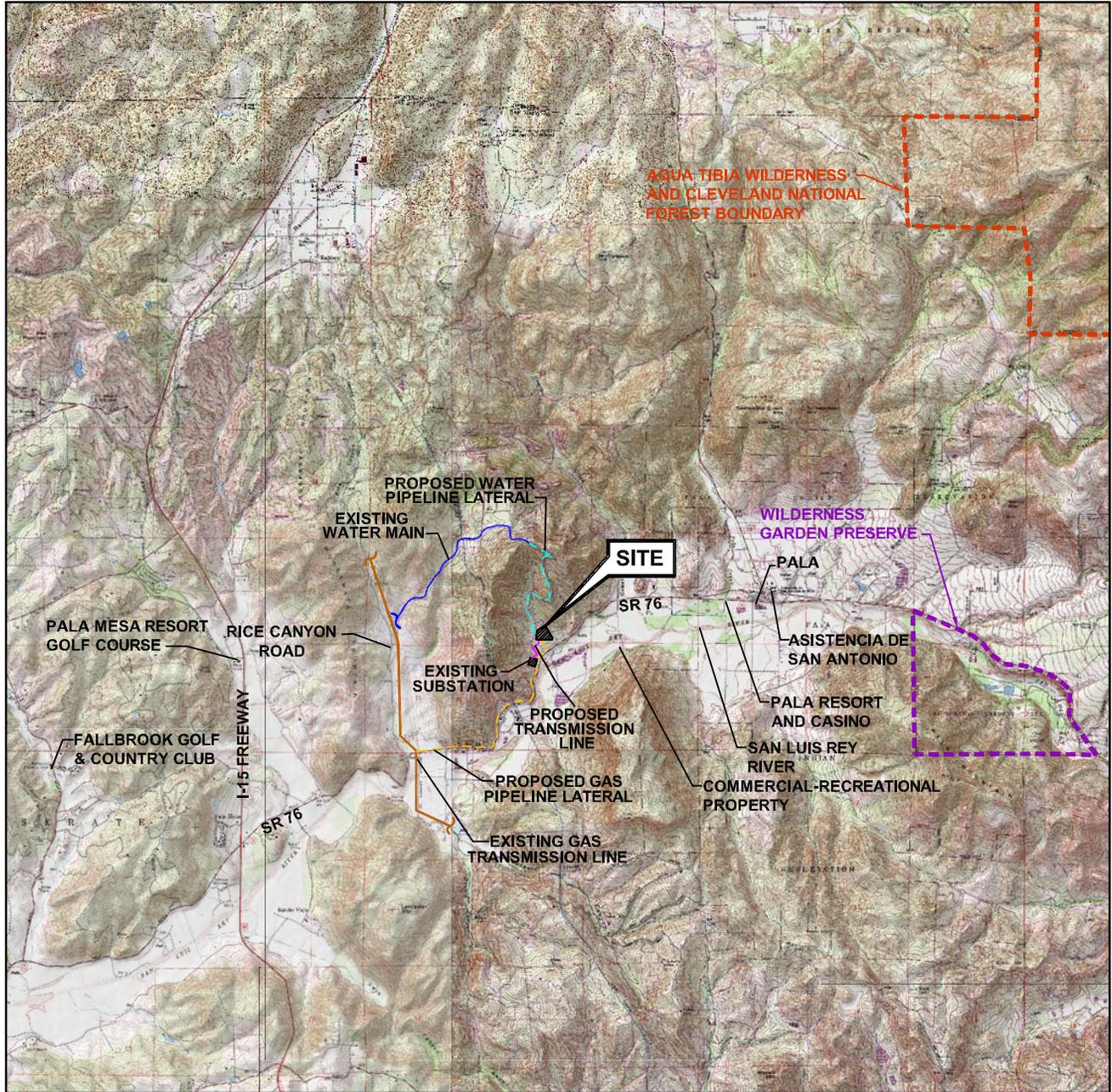
Project: Orange Grove Project - SPPE Application

Figure 6.13-15 – KOP 3 Existing Condition



Project: Orange Grove Project - SPPE Application

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SOURCE:

United States Geological Survey
7.5 Minute Topographic Map, 2000:
Pala, Bonsall, Temecula,
and Pechanga Quadrangles

0 1 2 3 4 MILES



SCALE 1:96,000



SITE LOCATION



PROJECT: 29031902

FACILITY:

ORANGE GROVE PROJECT
SAN DIEGO COUNTY, CALIFORNIA

RECREATIONAL AREAS AND
HISTORICAL SITES

FIGURE 6.13-16

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Figure 6.13-17 – KOP 1 Immediately After Construction



Project: **Orange Grove Project - SPPE Application**

Map Source: Sega, Inc. 2007.

Figure 6.13-18 – KOP 1 Ten (10) Years After Construction



Project: **Orange Grove Project - SPPE Application**

Map Source: Sega, Inc. 2007.

Figure 6.13-19 – KOP 1 Twenty (20) Years After Construction



Project: **Orange Grove Project - SPPE Application**

Map Source: Sega, Inc. 2007.

Figure 6.13-20 – KOP 2 Immediately After Construction



Project: **Orange Grove Project - SPPE Application**

Map Source: Sega, Inc. 2007.

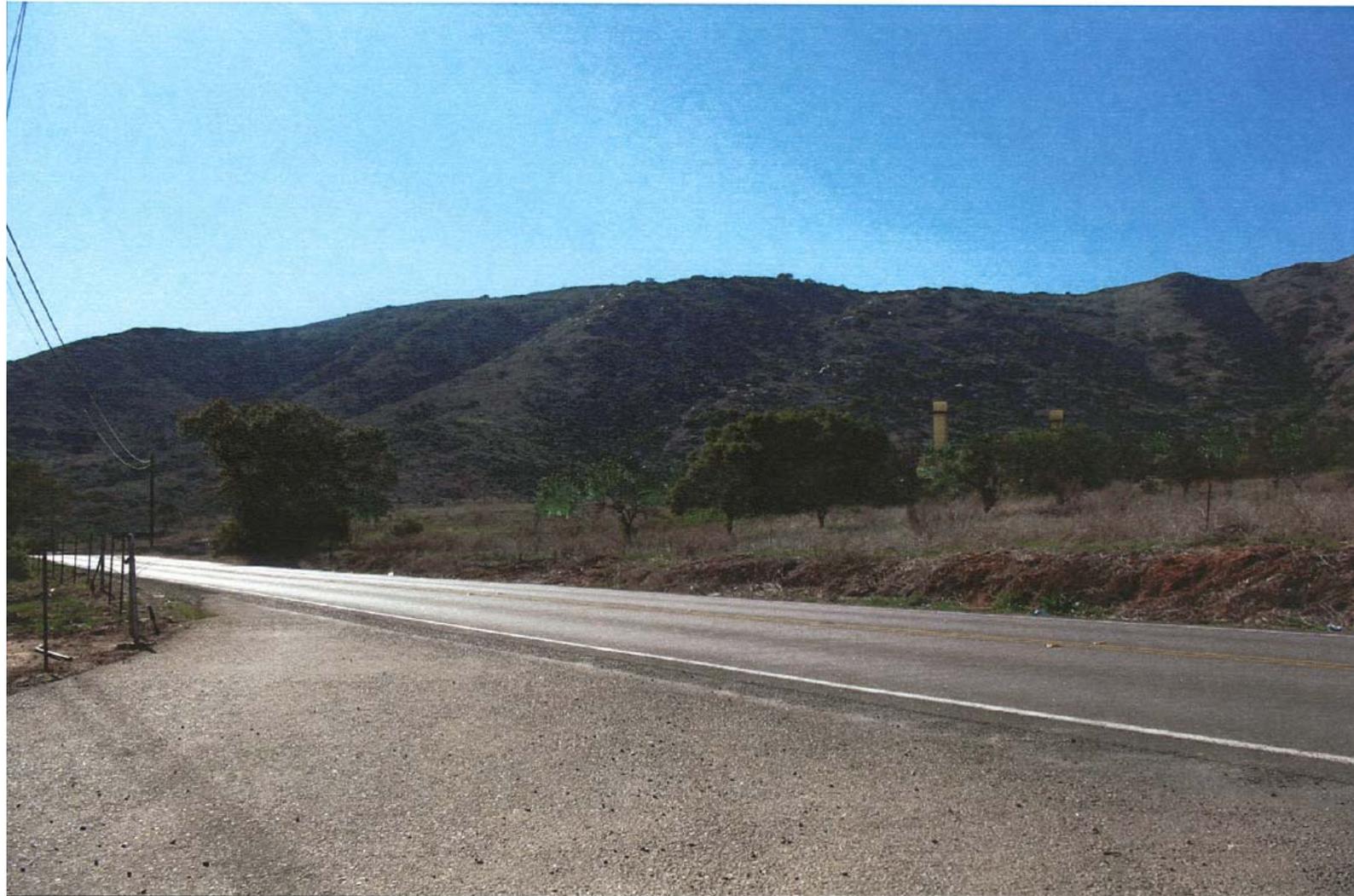
Figure 6.13-21 – KOP 2 Ten (10) Years After Construction



Project: **Orange Grove Project - SPPE Application**

Map Source: Sega, Inc. 2007.

Figure 6.13-22 – KOP 2 Twenty (20) Years After Construction



Project: **Orange Grove Project - SPPE Application**

Map Source: Sega, Inc. 2007.

Figure 6.13-23 – KOP 3 Immediately After Construction



Project: **Orange Grove Project - SPPE Application**

Map Source: Sega, Inc. 2007.

Figure 6.13-24 – KOP 3 Ten (10) Years After Construction



Project: **Orange Grove Project - SPPE Application**

Map Source: Sega, Inc. 2007.

Figure 6.13-25 – KOP 3 Twenty (20) Years After Construction



Project: **Orange Grove Project - SPPE Application**

Map Source: Sega, Inc. 2007.

6.13-C. B

**APPENDIX 6.13-C – SCENIC QUALITY INVENTORY & EVALUATION
CHART**

H-8410-1 - VISUAL RESOURCE INVENTORY
Scenic Quality - Explanation of Rating Criteria

landform

Topography becomes more interesting as it gets steeper or more massive, or more severely or universally sculptured. Outstanding landforms may be monumental, as the Grand Canyon, the Sawtooth Mountain Range in Idaho, the Wrangell Mountain Range in Alaska, or they may be exceedingly artistic and subtle as certain badlands, pinnacles, arches, and other extraordinary formations.

vegetation

Give primary consideration to the variety of patterns, forms, and textures created by plant life. Consider short-lived displays when they are known to be recurring or spectacular. Consider also smaller scale vegetational features which add striking and intriguing detail elements to the landscape (e.g., gnarled or wind beaten trees, and Joshua trees).

water

That ingredient which adds movement or serenity to a scene. The degree to which water dominates the scene is the primary consideration in selecting the rating score

color

Consider the overall color(s) of the basic components of the landscape (e.g., soil, rock, vegetation, etc.) as they appear during seasons or periods of high use. Key factors to use when rating "color" are variety, contrast, and harmony.

adjacent scenery

Degree to which scenery outside the scenery unit being rated enhances the overall impression of the scenery within the rating unit. The distance which adjacent scenery will influence scenery within the rating unit will normally range from 0-5 miles, depending upon the characteristics of the topography, the vegetative cover, and other such factors. This factor is generally applied to units which would normally rate very low in score, but the influence of the adjacent unit would enhance the visual quality and raise the score.

scarcity

This factor provides an opportunity to give added importance to one or all of the scenic features that appear to be relatively unique or rare within one physiographic region. There may also be cases where a separate evaluation of each of the key factors does not give a true picture of the overall scenic quality of an area. Often it is a number of not so spectacular elements in the proper combination that produces the most pleasing and memorable scenery - the scarcity factor can be used to recognize this type of area and give it the added emphasis it needs.

cultural modifications

Cultural modifications in the landform/water, vegetation, and addition of structures should be considered and may detract from the scenery in the form of a negative intrusion or complement or improve the scenic quality of a unity. Rate accordingly

H-8410-1 - VISUAL RESOURCE INVENTORY
 Scenic Quality - Inventory and Evaluation Chart

SCENIC QUALITY INVENTORY AND EVALUATION CHART				INSTRUCTIONS	
key factors	rating criteria and score				
landform	High Vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops; or severe surface variation or highly eroded formations including major badlands or dune systems; or detail features dominant and exceptionally striking and intriguing such as glaciers.	5	3	1	<p>Purpose: To rate the visual quality of the scenic resource on all BLM managed lands.</p> <p>How to Identify Scenic Value: All Bureau lands have scenic value</p> <p>How to Determine Minimum Suitability: All BLM lands are rated for scenic values. Also rate adjacent or intermingling non-BLM lands within planning unit.</p> <p>When to Evaluate Scenic Quality: Rate for scenery under the most critical conditions (i.e., highest user period or season of use, sidelight, proper atmospheric conditions, etc.)</p> <p>How to Delineate Rating Areas: Consider the following factors when delineating rating areas.</p> <ol style="list-style-type: none"> 1. Like Physiographic characteristics (i.e., landform, vegetation, etc.). 2. Similar visual patterns, texture, color, variety, etc. 3. Areas which have a similar impact from cultural modifications (i.e., roads, historical and other structures, mining operations, or other surface disturbances). <p>Explanation of Criteria: (See illustration 1.)</p> <p>NOTE: Values for each rating criteria are maximum and minimum scores only. It is also possible to assign scores within these ranges</p> <p>SCENIC QUALITY A = 19 or more B = 12-18 C = 11 or less</p>
	High Vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops; or severe surface variation or highly eroded formations including major badlands or dune systems; or detail features dominant and exceptionally striking and intriguing such as glaciers.	5	3	1	
vegetation	A variety of vegetative types as expressed in interesting forms, textures, and patterns.	5	3	1	
	A variety of vegetative types as expressed in interesting forms, textures, and patterns.	5	3	1	
water	Clear and dean appearing, still, or cascading white water, any of which are a dominant factor of the landscape.	5	3	0	
	Clear and dean appearing, still, or cascading white water, any of which are a dominant factor of the landscape.	5	3	0	
color	Rich color combinations, variety or vivid color; or pleasing contrasts in the soil, rock, vegetation, water or snow fields.	5	3	1	
	Rich color combinations, variety or vivid color; or pleasing contrasts in the soil, rock, vegetation, water or snow fields.	5	3	1	
influence of adjacent scenery	Adjacent scenery greatly enhances overall visual quality	5	3	0	
	Adjacent scenery greatly enhances overall visual quality	5	3	0	
scarcity	One of a kind; or unusually memorable, or very rare within region. Consistent chance for exceptional wildlife or wildflower viewing, etc. ^{1/}	5+	3	1	
	One of a kind; or unusually memorable, or very rare within region. Consistent chance for exceptional wildlife or wildflower viewing, etc. ^{1/}	5+	3	1	
cultural modifications	Modifications add favorably to visual variety while promoting visual harmony.	2	0	-4	
	Modifications add favorably to visual variety while promoting visual harmony.	2	0	-4	

^{1/}a rating of greater than 5 can be given but must be supported by written justification.