# VISUAL RESOURCES ANALYSIS NLP VALLEY CENTER, LLC PHOTOVOLTAIC SOLAR FARM

VALLEY CENTER, CALIFORNIA

PDS2013-MUP-13-019; Envn. Log No. PDS2013-ER-13-02-002

#### **AUGUST 2015**

#### Prepared for:

County of San Diego
Department of Planning and Development Services
5510 Overland Avenue, Suite 310
San Diego, CA 92123
Contact: Benjamin Mills, Project Manager

#### Applicant:

NLP Valley Center Solar, LLC 17901 Von Karman Avenue #1050 Irvine, California 92614 Contact: Patrick Brown Phone: 619-733-2649

#### Prepared by:

Michael Baker International 9755 Clairemont Mesa Boulevard, Suite 100 San Diego, California 92124 Contact: Steve Wragg Phone: 858-614-5000

JN 145596

Micole Marotz

PRIMARY AUTHOR/CONSULTANT FOR VISUAL ANALYSES Nicole Marotz, AICP, LEED AP RBF Consulting, A Company of Michael Baker International

### THIS PAGE INTENTIONALLY LEFT BLANK

## **TABLE OF CONTENTS**

EXECUTIVE SUMMARY			
INTRODUCTION	3		
Purpose	3		
Key Issues	3		
Principal Viewpoints to be Covered	4		
PROJECT DESCRIPTION	5		
General Plan Land Use Designations and Zoning	10		
Regulatory Framework	12		
VISUAL ENVIRONMENT OF THE PROJECT	24		
Project Setting	24		
Project Viewshed			
Landscape Units	29		
EXISTING VISUAL RESOURCES AND VIEWER RESPONSE	32		
Existing Visual Resources			
Viewer Response	35		
VISUAL IMPACT ASSESSMENT	39		
Guidelines for Determining Significance	39		
Key Views	39		
<u> </u>			
Summary of Project Impacts and Significance and Conclusions			
VISUAL MITIGATION MEASURES / DESIGN CONSIDERATIONS	72		
Visual Impact Analysis	72		
REFERENCES	74		
REPORT PREPARERS	75		
	INTRODUCTION  Purpose Key Issues Principal Viewpoints to be Covered  PROJECT DESCRIPTION  General Plan Land Use Designations and Zoning Regulatory Framework  VISUAL ENVIRONMENT OF THE PROJECT  Project Setting Project Viewshed Landscape Units  EXISTING VISUAL RESOURCES AND VIEWER RESPONSE  Existing Visual Resources Viewer Response  VISUAL IMPACT ASSESSMENT  Guidelines for Determining Significance Key Views Assessment of Visual Character and Visual Quality Assessment of Viewer Response Determination of Significance Cumulative Impact Analysis Summary of Project Impacts and Significance and Conclusions  VISUAL MITIGATION MEASURES / DESIGN CONSIDERATIONS Visual Impact Analysis		

## **List of Tables**

Table 1 Exis	sting General Plan Land Use / Regional Category / Zoning	10
Table 2 App	provals and Permits Anticipated	11
Table 3 Co	unty Designated Scenic Roadways	15
Table 4 Lar	nds Potentially Affected by the Project	26
Table 5 Vie	ewer Groups and Anticipated Exposure	37
Table 6 Stu	dy Area – Lot Coverage Analysis	57
	mulative Projects	
	List of Figures	
Figure 1	Regional Location Map	
Figure 2A	Local Vicinity Map	
Figure 2B	USGS Quad Map: Valley Center Quadrangle	
Figure 3A	Major Use Permit Plot Plan	
Figure 3B	Major Use Permit Plot Plan (Details)	
Figure 3C	Preliminary Grading Plan	
Figure 3D	Conceptual Landscape Plan	
Figure 4A	Existing General Plan Land Use	
Figure 4B	Existing Zoning	
Figure 5A	Aerial/Photo Location Map	
Figure 5B	Site Photographs	
Figure 5C	Site Photographs	
Figure 5D	Surrounding Land Uses	
Figure 6	Viewshed/Landscape Units Map	
Figure 7A	Key View 1 (Visual Simulation) – Cole Grade Road/Via Valencia I Northeast	_ooking
Figure 7B	Key View 2 (Visual Simulation) – Cole Grade Road/Via Valencia I Southeast	_ooking
Figure 7C	Key View 3 (Visual Simulation) – Via Valencia Looking South	
Figure 7D	Key View 4 (Visual Simulation) – Via Valencia/Wilhite Lane Lookin Southwest	g
Figure 7E	Key View 5 (Visual Simulation) – Cole Grade Road (Looking North	neast)
Figure 8	Discretionary Projects Map	

## **Appendices**

Appendix A: Project Conformance with Applicable Plans

## **Executive Summary**

The NLP Valley Center, LLC Solar Farm Project ("Project") Visual/Aesthetics Analysis provides an evaluation of potential Project impacts on existing visual resources and character of the surrounding community of Valley Center, California, in northeastern San Diego County.

The Project proponent, NLP Valley Center, LLC, is preparing an application for the development and operation of a photovoltaic (PV) solar farm to be located on privately-held lands near Valley Center. The Project requires approval from the County of San Diego for a Major Use Permit (MUP) to allow for the construction, operation, and maintenance of a solar energy generation facility.

The proposed PV solar facilities would be installed on a portion of the approximately 66-acre Project site, under the ownership of the Project applicant. The Project design consists of PV solar panels mounted on a collection of single-axis tracking (SAT) systems supported by machine-driven metal "H" beam or round pipe rack pilings; refer to Figures 3A and 3B, Major Use Permit Plot Plan. The maximum height of the top of panel would measure an average of seven feet at full tilt; however, in order to minimize grading, in certain cases where the ground undulates under the panels, the panel height could reach a maximum of approximately 12 feet as measured from the ground surface. Three small-scale building pads supporting the inverters/transformers and switchgear equipment would also be constructed within the panel fields.

With regard to visual resources, the Project would not result in the introduction of features that would significantly detract from or contrast with the visual character of the surrounding community by conflicting with visual elements or quality of an existing area (i.e., through conflicting style, size, coverage, scale, building materials, etc.). The Project would not result in the removal of or substantial adverse change to one or more features that contribute to the valued visual character or image of the Project area, including but not limited to designated landmarks, historic resources, trees, or rock outcroppings. Furthermore, the Project would not substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, trails within an adopted County or State trail system, scenic vista or highway, or recreational area. Additionally, the Project as designed would also not result in an inconsistency with any goals, standards, or policies related to visual resources as given in the County General Plan.

For the above reasons, it was determined that the Project would not result in potentially significant impacts on visual resources in the Valley Center community. Although the Project

proposes to retain several existing rows of citrus and the planting of additional landscape screening along potions of the Project frontage along Cole Grade Road and Via Valencia, these are considered to be design measures, not mitigation measures that would be required with adoption of the final conditions of approval. No significant impacts on visual resources would occur with Project implementation, and no mitigation measures are required or proposed.

## 1.0 Introduction

## 1.1 Purpose

The purpose of this Visual Resources/Aesthetics Analysis is to assess the potential visual impacts of the Project, determine the significance of the impacts under the California Environmental Quality Act (CEQA), and to propose measures to avoid, minimize, or mitigate potential adverse visual impacts associated with construction of the proposed NLP LLC Valley Center Solar Farm Project on the surrounding visual environment.

The proposed Project is for the installation and operation of a photovoltaic (PV) electrical generation facility near the community of Valley Center in north-central San Diego County; refer to Figure 1, Regional Location Map; Figure 2A, Local Vicinity Map; and, Figure 2B, USGS Quad Map: Valley Center Quadrangle. The Project represents an opportunity to provide the residents of Valley Center and the greater surrounding area with a source of clean energy from renewable sources.

As future population growth continues within San Diego County, the demand for electrical service will continue to increase accordingly. During the October 2007 wildfires, as well as other recent wildfire events, many residents within San Diego County experienced temporary shortages in available electrical power, due to the direct and/or indirect result of such fires. The Project represents an additional clean source of electrical power that would supplement energy currently supplied by the existing power grid, thereby reducing the potential for power shortages to occur and decreasing demands on the capabilities of the existing distribution system.

## 1.2 Key Issues

Key issues to be evaluated in this analysis are whether the Project has the potential to adversely impact the existing visual character or quality of the affected properties and/or the physical or natural surroundings. Potential visual effects are considered from public roadways and other public vantage points in and around the Valley Center community. Project design attributes; the potential to remove, change, or add features that contribute to the existing quality of the visual landscape; and, potential conflicts with applicable plans or policies relating to visual resources are considered.

## 1.3 Principal Viewpoints to be Covered

The proposed development area and associated offsite lands where improvements would occur for access purposes would be potentially visible from several principal viewpoints within the Valley Center area, as follows:

- 20 Cole Grade Road/Via Valencia Looking Northeast
- 🔊 Cole Grade Road/Via Valencia Looking Southeast
- via Valencia Looking South
- W Via Valencia/Wilhite Lane Looking Southwest
- ➣ Cole Grade Road Looking Northeast

Other views may occur from surrounding public vantage points, such as the Hell Hole Canyon County Open Space Preserve to the east and/or Dixon Dam and Lake City Park to the southwest. As the Project site lies along the valley floor, views to the site are restricted. Limited views may occur from surrounding residential and/or agricultural uses on private lands within the valley or on hillsides surrounding the valley floor, but would generally be visually reduced due to intervening vegetation, development, and/or elevational differences, in addition to distance from the Project site.

The key views identified above are considered herein, and the Project's potential to alter or affect existing views from these surrounding public vantage points within the viewshed are analyzed in depth. To support the analysis, visual simulations were prepared to illustrate the proposed Project elements and the visibility of such elements within the landscape. The visual simulations were prepared to evaluate the most visually impactive Project conditions (e.g. panel height of 12 feet at maximum vertical tilt as measured from the ground surface). In doing so, the environmental analysis considers the "worst case" scenario to demonstrate the most potentially adverse visual effects that the Project would have on the existing setting and on views from surrounding public vantage points; refer to Figures 7A to 7E, Visual Simulations. Additionally, landscape screening depicted in the visual simulations is intended to show the proposed landscaping at approximately a five-year maturity.

## 2.0 Project Description

## 2.0.1 Project Location

The proposed NLP Valley Center Solar Project (proposed "Project") site is located in the community of Valley Center, California in north-central San Diego County. The subject site is located at 29471 Cole Grade Road and is bordered by Cole Grade Road to the west and Via Valencia extends eastward from Cole Grade Road. The property is comprised of two separate parcels, which include County Assessor Parcel Numbers (APNs) 188-120-09 and -10, totaling approximately 66 acres. Refer to Figure 1, Regional Location Map; Figure 2A, Local Vicinity Map; and, Figure 2B, USGS Quad Map: Valley Center Quadrangle.

## 2.0.2 Project Description

The Project proponent is preparing an application for the development and operation of a photovoltaic (PV) solar farm to be located on privately-held lands near Valley Center. The Project requires approval from the County of San Diego for a Major Use Permit (MUP) to allow for the construction, operation, and maintenance of a solar energy generation facility.

The proposed PV solar facilities would be installed on a 26-acre portion of the larger 66-acre property, under the ownership of the Project applicant (NLP Valley Center, LLC). The unaffected (undeveloped) acreage onsite would generally remain in its present state upon implementation of the proposed Project as currently designed; refer to Figure 3A, Major Use Permit Plot Plan.

The Project design consists of PV solar panels mounted on a collection of single-axis tracking (SAT) systems supported by machine-driven metal "H" beam or round pipe rack pilings; refer to Figure 3B, Major Use Permit Plot Plan (Details). The PV solar panels would be manufactured at an offsite location and transported to the Project site. The solar panels would be installed in rows that rotate to face east in the morning and west in the afternoon hours, tracking the sun about a north/south axis to maximize solar absorption.

The point of interconnection (POI) for transmission purposes will occur at an existing utility pole within the Cole Grade Road right-of-way (ROW) adjacent to the Project boundary. Project access to the site will be from Cole Grade Road. No offsite roadway or gen-tie improvements are required.

The PV panels would be mounted on a single-axis tracker, which contains approximately 38 panels per tracker row. The center axis of the single-axis trackers would have a nominal height of four feet above grade; refer to Figure 3B, Major Use Permit Plot Plan (Details). The PV panels would rotate through a 90 degree arc during the day. The maximum height of the top of panel would measure an average of seven feet at full tilt; however, in certain cases where the ground undulates under the panels, the panel height could reach a maximum of approximately 12 feet as measured from the ground surface. The panels themselves would be approximately 39 inches long by 77 inches long.

The direct current (DC) power generated by the PV panels would be transmitted via underground cable to two inverter/transformer pads and one switchgear pad located within the proposed onsite development area, where the DC power would be converted to alternating current (AC) power. Each inverter/transformer equipment pad would be approximately 10 feet wide by 32 feet long; the switchgear pad would be approximately 7.5 feet wide by 8.5 feet long. The equipment installed on the pads would measure a maximum of approximately 10 feet in height (above pad elevation), or 12 feet in height as measured from the ground surface. The pads would each support three 500 kilowatt (kW) inverter and one transformer. All inverter/transformer/switchgear structures would be constructed of non-flammable materials (e.g. concrete block, metal, or similar). The AC power from the inverter stations would be transmitted via AC cable to the 15 kilovolt (kV) switchgear, used to transmit the power to SDG&E's 12kV distribution system. The switchgear would contain breakers, relays, and monitoring and metering equipment necessary to provide for the safe and efficient transfer of power to SDG&E.

The ultimate arrangement/number of solar panels, equipment pads and structures, and internal access roads are shown on the MUP Plot Plan; refer to Figures 3A and 3B, Major Use Permit Plot Plan, and Figure 3C, Preliminary Grading Plan; however, the ultimate layout is subject to modification at final engineering design. The solar technology system being considered is described in brief below.

## 2.0.3 System Interconnection Points

As designed, the Project would underground the utility lines between the solar panels within the interior of the site. These lines would extend to the switchgear pad; refer to Figure 3A, Major Use Permit Plot Plan. From the switchgear pad, the line would be undergrounded to an existing SDG&E utility pole supporting a 12 kV (overhead) distribution line within the Cole Grade Road right-of-way. Where the line meets the existing utility pole, the line would be



extended aboveground to connect to the existing SGD&E distribution line. As such, utility poles and overhead lines are located offsite and are already present within the visual landscape. The Project would not require replacement of or upgrades to any existing offsite utilities.

## 2.0.4 Inverter/Transformer/Breaker Equipment

A total of three equipment pads would be constructed within the solar panel fields to support the inverters/transformers; one of the three equipment pads would support the switchgear. The equipment would be approximately ten feet in height when measured from the top of pad. The equipment would be constructed of non-flammable materials (i.e., steel).

## 2.0.5 Grading

The PV solar panels would be installed in parallel rows running north/south; refer to Figures 3A and 3B, Major Use Permit Plot Plan. Although the majority of land surface in the MUP area is flat, portions would require minor grading and/or would be cleared and grubbed to allow for installation of the panels and associated facilities. The Project as proposed would require an estimated 6,000 cubic yards (c.y.) of balanced cut and fill. No offsite grading is required or proposed, with exception of minor grading within the Cole Grade Road ROW to widen the Project entrance to 24 feet in width and provide a taper; refer to Figure 3C, Preliminary Grading Plan.

## 2.0.6 Lighting and Glare

Limited Project lighting would be installed to allow for security. At a minimum, permanent lighting would be provided for the outdoor equipment access areas, such as at the inverters and switchgear; under equipment shade structures; and, at the site entrance. Low-level lighting would be installed at the main entry gates to facilitate access.

All lighting would be operated manually or activated via motion sensors and would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. All lighting would conform to County of San Diego outdoor lighting requirements. All outdoor lighting controls would incorporate dusk-to-dawn photocell controllers, occupancy sensors, and/or switches as appropriate. Lighting levels shall be as recommended in Illuminating Engineering Society (IES) standards. Suitable fixtures would be specified and installed according to the hazardous area classification, if applicable.

## 2.0.7 Signage

Minimal Project signage is proposed to allow for the identification of the Project owner and for safety and security purposes. Minimal Project signage is proposed to allow for the identification of the Project owner and for safety and security purposes. Signage would be installed include system identification, safety, and warning signs. Signage would be located throughout the development area in accordance with applicable Occupational and Safety and Health Administration (OSHA) requirements and as required by the Authority Having Jurisdiction. Illuminated signage at the Project entrance and each inverter station that notes the location and identification number of each electrical grid disconnect and circuit breaker would also be installed.

## 2.0.8 Access / Circulation

#### Construction Access

All materials for Project construction would be delivered to the site by truck. The majority of truck traffic would occur on designated truck routes and/or major streets (e.g., Cole Grade Road). Traffic resulting from construction activities would be temporary and may occur along area roadways as workers and materials are transported to and from the Project area. If directed by the County, and prior to the issuance of a grading/building permit, the Project applicant would prepare a Traffic Construction Mitigation Plan to ensure that circulation on the affected roadways is not adversely affected and that public safety is maintained.

### Long-Term Access

The provision of road access would include, at minimum, from the point of entry from an approved public access point to the PV site, a site perimeter loop, and the area immediately around transformers, inverters, switchgear, and other similar structures. All transitions between the public access point, loop, and other intersections would be constructed with appropriate smooth transitions.

Permanent access to the site would occur from Cole Grade Road. No offsite roadway improvements are required, other than minor improvements at the entrance drive to provide a 24-foot access drive and a driveway taper; refer to Figure 3A, Major Use Permit Plot Plan.

Interior access would be provided by a system of 24-foot wide all-weather access drives that would allow for adequate emergency access to all PV panel blocks and inverter stations. Access

roads would be at least 24 feet wide and crowned or have a consistent side slope (between 0.5% and 2%, maximum) to provide proper drainage. All access road sections would be designed per the recommendation of the site-specific Geotechnical Report and per governing County standard design specifications. All fire access roads would be designed with an all-weather surface (decomposed granite or gravel) and capable of supporting a minimum 75,000-pound fire apparatus bearing load. These drives would also be used for purposes of Project maintenance. A series of smaller 10-foot wide roadways would be provided within the solar PV field to provide access for maintenance vehicles.

With regard for the perimeter road and module row spacing, a minimum of 12 feet would be provided between the security fence and next nearest obstruction (e.g., solar array frame). Additionally, a minimum of seven feet between PV module rows would be provided to allow access for panel cleaning and maintenance. Consistent with County of San Diego requirements, a 30-foot wide fuel management zone (FMZ) (brush clearing) would be provided around the perimeter of the onsite development area to reduce the potential for the spread of wildfire.

#### Fencing/Gates

The perimeter of the MUP area would be fenced with an (up to) 8-foot high chain link fence for security purposes to prevent public access. The entrance at Cole Grade Road would be gated with one double gate of 24 feet in width. A secondary gate is proposed at the eastern end of the MUP area to provide access to the portion of the property where the existing residential structures are located.

Six video cameras would be strategically placed on the security fence for surveillance of the majority of the development area. Video cameras would utilize an internet-based communications system via a phone line or cellular system. The gates would meet the requirements of San Diego County Fire Code Section 96.1.503.6 for automatic operation with battery back-up. The gates would open immediately upon emergency vehicle strobe light activation from either direction of approach and would include a Knox Box key-operation switch.

## 2.0.9 Project Schedule / Phasing

It is anticipated that overall construction of the Project would take approximately four months to complete, with crews working five days per week, eight hours per day. Weekend and/or holiday work is not anticipated to be required. Construction of the Project would occur at one time, and phasing is not proposed.

### 2.0.10 Trails

The Project proposes to dedicate an approximately 47-foot wide easement along the Project frontage to allow for ultimate half-width improvement of Cole Grade Road within the ROW. The width of the easement would also allow for future construction of a public recreational trail, consistent with requirements of the Valley Center Community Trails and Pathways Plan; however, construction of this trail and half-width improvements to Cole Grade Road would be by others and is not required or proposed as part of the Project.

## 2.1 General Plan Land Use Designations and Zoning

General Plan land use designations and zoning for the affected parcels are given in Table 1, below. No changes to either the existing General Plan land use or zoning are proposed with the Project. Existing General Plan land use designations and zoning for the affected parcel are given in Table 1, below, and shown in Figure 5A, Existing General Plan Land Use, and Figure 5B, Existing Zoning. No changes to either the existing General Plan land use or zoning are proposed by the Project. The proposed Project would be an allowable use with County approval of an MUP.

TABLE 1
EXISTING GENERAL PLAN LAND USE / REGIONAL CATEGORY / ZONING

Assessor Parcel Number	Approximate Acreage	General Plan Land Use Designation	Regional Category	Zoning
188-120-09	26.33*	Semi-Rural Residential (SR-2) 1 DU/2AC	Semi-Rural	Rural Residential (RR)
188-120-10	39.86*	Semi-Rural Residential (SR-2) 1 DU/2AC	Semi-Rural	Rural Residential (RR)

<sup>\*</sup>Acreage taken from Assessor Parcel Sheets

## 2.1.1 Anticipated Permits and Agency Approvals Required

The County of San Diego will act as the Lead Agency under the requirements of CEQA. Approval from the County of San Diego would be required for grading and construction permits, as well as for a right-of-way encroachment permit, if applicable, prior to commencement of ground-disturbing activities. The anticipated permits and approvals required are listed in Table 2 in the general order in which they would be obtained.

TABLE 2
APPROVALS AND PERMITS ANTICIPATED

Permit/Approval	Approving Agency
Major Use Permit	County of San Diego – Department of Planning & Development Services
Air Quality Permit to Construct	Air Pollution Control District
National Pollutant Discharge Elimination System (NPDES) Permit	San Diego Regional Water Quality Control Board (RWQCB)
General Construction Storm Water Permit	RWQCB

## 2.1.2 Decommissioning Plan

Once built, the Project would operate at a minimum for the 20-year life of its Power Purchase Agreement (PPA). It is likely, because much of the needed electrical infrastructure will have been developed, that the Project would continue to be upgraded and used to generate solar energy beyond the term of the initial PPA. Therefore, it is possible that the site would remain in solar energy production for the foreseeable future.

Prior to issuance of a grading permit, the applicant will be required to prepare a Decommissioning Plan to govern future decommissioning of the site at the time when appropriate. If the Project were ever to be decommissioned, the panels, support structures, and electrical equipment would be removed from the site and it would be returned to a use consistent with the current zoning of the site (Rural Residential).

As appropriate, the Decommissioning Plan would identify such actions as removal of all above-grade structures from the site and any non-shared transmission facilities; associated decompaction activities; recontouring; application of hydroseeding; and/or, installation of permanent best management practices (BMPs) if needed. The Project shall comply with all requirements of the San Diego Regional Water Quality Control Board (RWQCB) General Construction Permit for Notice of Termination filing associated with site stabilization.

Financially, the Project and site owner would assume responsibility for decommissioning. The cost of decommissioning would be relatively low, as no earthwork would be necessary, and the panels, support structures, and electrical equipment would be salvaged and recycled. Implementation of the Decommissioning Plan would also ensure that, if operation of the PV solar facility were to cease, adverse visual effects would not occur as a result and that the land would be returned to a generally disturbed state, consistent with the visual setting prior to Project development. Removal of all onsite Project components as part of the

Decommissioning Plan would also ensure that the setting does not degrade visually from any such elements falling into disrepair over the long-term, due to non-operation.

## 2.2 Regulatory Framework

#### 2.2.1 State of California Guidelines

The Project is subject to technical and environmental review pursuant to the California Environmental Quality Act (CEQA), in conformance with applicable regulatory guidelines established by the County of San Diego.

Appendix G of the CEQA Guidelines states that a project has the potential for a significant impact if it will:

- a) Have a substantial adverse effect on a scenic vista;
- b) Substantially damage scenic resources, including, but not limited to: trees, rock outcroppings, and historic buildings within a state scenic route;
- c) Substantially degrade the existing visual character or quality of the site and its surroundings; or,
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views of the area.

In addition, CEQA Section 15064 (b) states "...the significance of an activity may vary with the setting ... an activity which may not be significant in an urban area may be significant in a rural area." This statement is applicable to the determination of the significance of a visual effect for the Project.

## 2.2.2 San Diego County Plans and Policies

### San Diego County General Plan

The County of San Diego General Plan (General Plan) was adopted August 3, 2011 by the County Board of Supervisors. The General Plan is intended to provide guidance for the long-term development of San Diego County and includes various Elements that provide guidance for accommodating future growth while retaining or enhancing the County's rural character, its economy, its environmental resources, and its unique communities. Goals, policies and objectives are provided within each of the Elements to guide future land development and

ensure consistency with the County's intended vision for the future of San Diego County. The applicable goals, objectives, and policies are identified below, and a discussion of Project consistency with such measures is included in Appendix A of this document.

The Guiding Principles of the General Plan are to:

- **Support** a reasonable share of projected regional population growth;
- Promote health and sustainability by locating new growth near existing and planned infrastructure, services, and jobs in a compact pattern of development;
- Reinforce the vitality, local economy, and individual character of existing communities when planning new housing, employment, and recreational opportunities;
- Promote environmental stewardship that protects the range of natural resources and habitats that uniquely define the County's character and ecological importance;
- Ensure that development accounts for physical constraints and the natural hazards of the land;
- Provide and support a multi-modal transportation network that enhances connectivity and supports community development patterns and, when appropriate, plan for development which supports public transportation;
- Maintain environmentally sustainable communities and reduce greenhouse gas emissions that contribute to climate change;
- Preserve agriculture as an integral component of the region's economy, character, and open space network;
- Minimize public costs of infrastructure and services and correlate their timing with new development; and,
- Recognize community and stakeholder interests while striving for consensus.

#### Chapter 3 - Land Use Element

#### Planning for Sustainability

**Policies** 

EU LU-6.9 Development Conformance with Topography. Require development to conform to the natural topography to limit grading; incorporate and not significantly alter the dominant physical characteristics of a site; and, to utilize natural drainage and topography in conveying storm water to the maximum extent practicable.

#### Semi-Rural/Rural Lands

#### **Policies**

EU-10.2 Development - Environmental Resource Relationship. Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character and avoid sensitive or intact environmental resources and hazard areas.

#### GOAL LU-12

#### Infrastructure and Services Supporting Development

#### **Policies**

LU-12.4 Planning for Compatibility. Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas. Require context sensitive Mobility Element road design that is compatible with community character and minimizes visual and environmental impacts; for Mobility Element roads identified in Table M-4, an LOS D or better may not be achieved.

#### Chapter 5 – Conservation and Open Space Element

#### **Visual Resources**

According to the Conservation and Open Space Element, a highway corridor generally includes the land adjacent to and visible from the vehicular right-of-way. A "scenic highway" may include "any freeway, highway, road, or other vehicular right-of-way along a corridor with considerable natural or otherwise scenic landscape." A highway may be designated as "scenic" depending on how much of the natural landscape can be seen by travelers, the aesthetic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

The Conservation and Open Space Element designates several roads as County Scenic Roads within the Project vicinity. Table 3, below, identifies the distance to the Project site and the potential visibility of the site from the roadway. Refer also to Figure 6, Viewshed/Landscape Units Map, which shows the visibility of the Project site from these roadways (areas shaded in green would have views to the Project site).

TABLE 3
COUNTY DESIGNATED SCENIC ROADWAYS

Roadway	Distance from Project Site (at Closest Point)	Visibility of Project Site
State Highway 76 - from the City of Oceanside east to State Highway 79 (Eligible State Scenic Highway / County Scenic Highway)	Approximately 3.8 miles northeast of Project site	Project site not visible due to distance and intervening topography which obscures the site from view
Lilac Road/Valley Center Road (S6) – from State Highway 76 to State Highway 76 (County Scenic Highway)	Approximately 3 miles east of Project site	Project site not visible due to distance and intervening topography which obscures the site from view
Vista Way, Gopher Canyon, and Old Castle Roads - from Vista city limits north and east to Lilac Road (County Scenic Highway)	Approximately 2.6 miles northwest of Project site	Project site not visible due to distance and intervening topography which obscures the site from view
Lake Wohlford Road from Valley Center Road east (Escondido City limits) to Valley Center Road (excluding portion within City of Escondido)	Approximately 2.7 miles southeast of Project site	Project site not visible from this roadway. The flat terrain and mature vegetation within the valley would obscure views to the Project site.

#### Goal COS-11

Preservation of Scenic Resources. Preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized.

#### **Policies**

- **COS-11.1 Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.
- **COS-11.2 Scenic Resource Connections.** Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.

- COS-11.3 Development Siting and Design. Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:
  - Creative site planning;
  - Integration of natural features into the project;
  - Appropriate scale, materials, and design to complement the surrounding natural landscape;
  - Minimal disturbance of topography;
  - O Clustering of development so as to preserve a balance of open space vistas, natural features, and community character; and,
  - Creation of contiguous open space networks.
- COS-11.5 Collaboration with Private and Public Agencies. Coordinate with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.
- **COS-11.7 Underground Utilities.** Require new development to place utilities underground and encourage "undergrounding" in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.

#### GOAL COS-13

Dark Skies. Preserved dark skies that contribute to rural character and are necessary for the local observatories.

#### **Policies**

- **COS-13.1 Restrict Light and Glare.** Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.
- COS-13.2 Palomar and Mount Laguna. Minimize, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.

**COS-13.3 Collaboration to Retain Night Skies.** Coordinate with adjacent Federal and State agencies, local jurisdictions, and tribal governments to retain the quality of night skies by minimizing light pollution.

Air Quality, Climate Change, and Energy

GOAL COS-14 - Sustainable Land Development

#### **Policies**

**COS-14.4 Sustainable Technology and Projects.** Require technologies and projects that contribute to the conservation of resources in a sustainable manner, that are compatible with community character, and that increase the self-sufficiency of individual communities, residents, and businesses.

#### Valley Center Community Plan

The Valley Center Community Plan is supplemental to the County General Plan and provides goals and policies to guide development of the Valley Center area of north-central San Diego County, which includes the Project site.

#### 1. COMMUNITY CHARACTER

#### GOALS

20 1. Preserve and enhance the rural character of Valley Center by maintaining a pattern of land use consistent with the following regional categories.

#### B. SEMI-RURAL LANDS

Preserve and maintain the overall rural and agricultural character of the semi-rural areas.

#### 2. LAND USE

#### GENERAL GOALS

- A pattern of development that conserves Valley Center's natural beauty and resources, and retains Valley Center's rural character.
- Development that maintains Valley Center's rural character through appropriate location and suitable site design.

#### COMMERCIAL GOAL

#### POLICIES AND RECOMMENDATIONS

- 6. Commercial/civic uses shall not interfere either functionally or visually with adjacent land uses or the rural atmosphere of the community.
- 7. Commercial/civic uses shall be periodically reviewed to ensure that the standards for noise, light, traffic, odors and all other conditions of approval are continuing to be met.
- 8. Discourage commercial and civic uses outside of the Villages and limit all such uses to those that are clearly demonstrated as needed and which are compatible with the rural lifestyle of the Valley Center Community Plan.

#### 4. MOBILITY

#### **GOAL**

A circulation system that achieves the combined objectives of connectivity and safety for all users (automobiles, bicyclists, equestrians and pedestrians), and also preserves the rural character of the community.

#### POLICIES AND RECOMMENDATIONS

6. Existing trees and vegetation located within the "Right-of-Way" of all public roads, and determined to be of significant visual benefit shall be transplanted or replaced consistent with the Valley Center Design Guidelines.

#### 6. CONSERVATION

#### GENERAL GOALS

Provide for a "dark sky" which would retain the rural setting and not detract from astronomical research at Palomar Mountain.

#### POLICIES AND RECOMMENDATIONS

- 20 17. During the discretionary permit process, encourage the dedication of trails to form a local trail network with a central unifying hub near Cole Grade and Valley Center Roads.
- 18. Use low sodium lights and light shielding for new subdivisions and use permits as required by the "Dark Sky" Ordinance for those properties within a specified radius of the observatory at Palomar Mountain.

#### San Diego County Zoning Ordinance

Portions of the County Zoning Ordinance that may affect the assessment of visual impacts are generally zoning overlay designators. Relevant Special Area Regulations Designators include:

- **№** B Community Design Review Area
- ➣ D Design Review Area
- **⊗** G − Sensitive Resource
- H Historic/Archaeological Landmark or District
- ➣ J Special Historic District
- **⊗** S Scenic Area

The Project site is subject to the "G" Designator for building height and the "B" Designator for setbacks. No other Designators, including the Special Area Regulations Designators, apply to the Project or other associated lands affected by Project-related infrastructure improvements.

## 2.2.3 Design Policies and Guidances

Valley Center Design Guidelines

#### PART I. COMMUNITY DESIGN OBJECTIVES

#### Design Objectives

- A. Roadway Design Important Thoroughfares
- 2. Design of the Road Edge
  - A twenty-foot deep landscaped edge zone is to be provided along the entire length of Valley Center, Cole Grade, Woods Valley and Lilac Roads. The edge zone will reinforce Valley Center's character as a rural residential community by emphasizing planting of native vegetation, low walls of local stone, wood rail and agricultural fences to give the road edge visual definition and continuity. The edge zone is a requirement for new development in the community. Criteria for its design are given in Design Guideline, "Design of the Road Edge."

#### Underground Utilities

The undergrounding of overhead utilities on Valley Center Road should be implemented as soon as possible. The community is committed to reducing the present harmful visual impact of utility poles and wires throughout Valley Center.

#### PART III. THE DESIGN GUIDELINES

#### 1. Site Design Process

- B. Site Design Concept
- 1. Relationship to the Community and Neighboring Properties
  - Does the site plan respect the existing views, privacy, quiet, sun and light exposure of neighboring properties?
- 2. Relationship to Existing Natural Features
  - Has the project made a sufficient effort to minimize grading and alteration of natural landforms?
  - Does the project retain important vegetation, rock outcroppings, and other natural features?

#### 2. Protection of Natural Features

#### Guidelines:

A. Hierarchy of Importance.

Development on all sites will require judgment about which natural features are most important to preserve. Although a consistent rule is not possible, the general order of importance in retention shall be:

- (1) Natural contours and landforms;
- (2) Large rock outcroppings;
- (3) Natural drainage courses;
- (4) Oak and sycamore trees;
- (5) Other mature specimen trees; and,
- (6) Views.
- C. Other mature trees should be retained where feasible.

This will require careful judgment weighing the value and hierarchy of all natural features, the size and species of the tree, and the developer's program for the site. This should not preclude removal of noxious or undesirable trees.

#### D. Topography.

Building pads are to be sited within the zoned setbacks and are to disturb the natural contours as little as possible. Balancing of cut and fill areas is encouraged. See "Save the Oaks and Sycamores" (Guideline 3) for grading techniques necessary for the preservation of existing oaks.

#### F. Views.

- Existing views important to neighboring properties shall be studied and preserved where feasible. New site plans for housing should take advantage of potential views from the site. Two types of views are important:
  - Views from adjoining roads and lots through the site; and,
  - Views from within the site.
- Natural features worth "viewing" include mountains, valley views, open spaces of existing flood plains, streams, lakes, tree stands, and western horizons.

## 4. Design of the Road Edge – Valley Center, Cole Grade, Lilac, and Woods Valley Roads

#### A. Landscaped Edge Zone.

A minimum 20 feet deep landscaped zone (the front 20 feet of the property) shall be located along the major road edge, interrupted only by permitted access driveways and sidewalks. No buildings or off-street parking areas are to be located in this zone.

#### C. Character and Elements.

The landscaped zone should reinforce Valley Center's character as a rural residential community. If walls or fences are used in landscaping, low walls of native stone, wooden rail fences, agricultural fences, placement of native rocks and boulders are recommended to give the road edge zone visual definition and prominence. Gateways and driveways may be given special emphasis.

#### E. Elements Not Acceptable.

Chain link fences, wall over 3 feet high, fences over 42 inches high, unfinished concrete masonry walls, artificial stone walls or objects, dumpsters or trash receptacles, artificial plants or turf, decorative or commercial display objects, elements with highly-effective or bright-colored surfaces, and other objects which are frivolous, distracting, or not in harmony with the valley landscape and community design goals.

F. Signs in conformance with the Design Guidelines are permitted.

#### 5. Architectural Character

- E. Walls, Fences and Accessory Structures
- 1. Fences and Walls
  - Fences and walls are used to provide security, visual privacy, and/or define a space. The impact of a fence or wall on the surrounding neighborhood is determined by its size, type, layout, and character. Fences and walls should be minimized along public streets.
  - Walls and fences should be designed to be compatible with the surrounding landscape and architectural concept.
  - The following is a list of wall and fence materials whose use is not acceptable:
    - O Chain link or open wire, except in landscape-screened service or security areas.
    - Corrugated metal
    - Bright colored plastic
    - Reed material

#### 8. Visual Linkages Between Planting, Buildings, and Open Spaces

#### Guidelines:

- Tree masses are a valuable means of defining outdoor spaces and visually linking a site development to the larger community landscape.
- Trees planted in rows along roads, site boundaries and in orchards are common in rural areas and may be used in similar patterns where site conditions suggest.

#### 9. Planting Design and Plant Lists

#### Guidelines:

#### A. Planting Design Principles

- Valley Center is a rural community. To protect its rural atmosphere, new plantings must be compatible with the existing natural landscape and desired community character, both in form and arrangement.
  - 1. Roadway and road edge planting on private property should reflect:
    - a. The natural grouping of trees in clusters, as opposed to traditional rigid alignment in urban areas.
    - b. Limited use of shrubs in plantings with trees and ground covers. Arid plant communities do not naturally support a great number of plants.
    - c. Naturalized plant arrangements as opposed to stylized.

#### 10. Site Lighting

#### A. General Requirements

Site lighting shall be limited to that necessary for security, safety, and identification. Other uses of site lighting for accent or decorative purposes is discouraged, except when provided by low-level fixtures and done in a careful manner. The Design Review Board will not recommend lighting plans that conflict with community character of provide excessive levels of lighting.

#### D. Site Lighting Fixtures

Fixtures should be compatible with the architectural character of the buildings served.

## 3.0 Visual Environment of the Project

## 3.1 Project Setting

### 3.1.1 Surrounding Land Uses

The Project area is located within the community of Valley Center in north-central San Diego County. The region is generally defined by Pala Mountain and Pauma Valley to the north and east, Bear Ridge and the Burnt Mountain Range to the south, and the Merriam Mountains and Interstate 15 to the west. Several Native American Tribal Lands occur in the region, none of which occur in the immediate vicinity of the Project site. No National Forest Lands, or Bureau of Land Management lands occur in the immediate area. The Hell Hole Canyon County Open Space Preserve is located approximately 4.5 miles to the east of the site, and Daley Ranch is located to the southwest.

The "Town Center" of the Valley Center community generally tends to be more urban in nature, represented by a range of residential, commercial, and industrial-type uses occurring at a higher density. Land uses become more rural as one travels into the surrounding lands where larger-acre, lower density single-family residential uses mixed with large- and small-scale agricultural uses become more common.

Single-family residential development combined with small-scale agricultural uses, generally in the form of citrus orchards, are generally present on lands to the north, south, east, and west of the Project site. Cole Grade Road borders the site to the west; Wilhite Lane borders the subject property to the east. Commercial egg productions are present to the south and west of the site. Refer also to Figure 5D, Surrounding Land Uses.

The Project site is located along the valley floor, with hillsides of varying elevation rising on lands surrounding the site; refer to Figure 2B, USGS Quad Map. Undeveloped and disturbed lands are interspersed with rural-type development throughout the valley floor. Land uses along the hillsides are generally represented by single-family rural-residential uses. Due to their location at a higher elevation than the Project site, a number of homes in the surrounding area may have views to the valley floor, and therefore, the Project site; however, such views are generally diminished by distance, intervening development, and/or established landscaping.

To the south lies the Valley Center Primary School (approximately 0.57 miles from the site); the Robert Adams Community Park (approximately 0.75 mile); and, the Valley Center

Elementary School (approximately 0.85 mile). Additionally, the Countryside Veterinary Hospital is located approximately 0.35 mile to the south along Cole Grade Road. The Valley Baptist Church is approximately 0.22 mile to the northwest of the site off of Miller Road, and the Church of Jesus Christ of Latter-day Saints is located approximately 0.45 mile to the southeast. The Valley Center History Museum is located approximately 0.35 mile to the southwest of the site.

Palomar Observatory lies approximately 11.5 miles to the northeast of the Project site. The Laguna Mountain Observatory lies approximately 45 miles to the southeast.

## 3.1.2 Project Site

The subject property currently supports fallowed agricultural lands (citrus grove). Many of the citrus trees have been removed from the property, and the land is generally devoid of vegetation or has minor cover of ruderal species. Several rows of trees are present along the western and northern (along Via Valencia) boundaries of the site that would remain with implementation of the Project as designed to provide screening of the proposed development from adjacent roadways (e.g., Cole Grade Road), in combination with landscape screening proposed along portions of the Project frontage along Cole Grade Road and Via Valencia. Refer to Figure 5A, Aerial/Photo Location Map; and, Figures 5B and 5C, Site Photographs.

Two ephemeral drainages traverse the central portion of the larger 66-acre property, south of Via Valencia, generally flowing from northeast to southwest, and joining one another near the southern property boundary. The drainages are located within the larger MUP use permit boundary area and support sparse riparian vegetation, including coast live oak woodland and Engelman oak woodland, as well as several palm trees. Other non-native plant species are also present along the drainages (e.g. mulefat scrub).

Several small structures and infrastructure supporting the former agricultural uses including a single family residential structure and storage sheds are located east of the proposed PV facility and MUP area on the 66-acre property and will remain.

The Project site is located along the valley floor, and onsite topography is generally flat. Onsite elevations range from approximately 1,532 feet above mean sea level (amsl) in the northeastern portion of the site to approximately 1,465 feet amsl in the southwestern portion of the site. Of the approximately 26-acre MUP area, approximately 98.8 percent of lands (or 25 acres) have a slope of zero to 15 percent; only one percent (0.3 acres) have slopes of greater than 25 percent.

No steep slopes, hillsides, or areas prone to landslide or subsidence occur onsite or on adjacent lands. Although the Project site is located in southern California, which is a known seismically-active area, no known existing fault lines or other conditions resulting in potential geologic instability occur onsite or on adjacent lands.

TABLE 4
LANDS POTENTIALLY AFFECTED BY THE PROJECT

APNs Affected	Approx. Acreage (in acres)	General Location	Current Onsite Land Use / Characteristics	Surrounding Land Uses	Future Facilities Considered
188-120-09	26.33*	South of Via Valencia Between Cole Grade Road and Wilhite Lane	Vacant / Fallowed Agricultural Land (Citrus Grove)	North: Project Site, Via Valencia, Single-Family Residential; East: Vacant Land, Limited Agricultural Uses, Single-Family Residential; South: Commercial Egg Farm; West: Vacant	Solar Panels / Associated Transmission Facilities
188-120-10	39.86*	South of Via Valencia Between Cole Grade Road and Wilhite Lane	Supporting Outbuildings / Fallowed Agricultural Land (Citrus Grove)	North: Project Site; East: Project Site; South: Commercial Egg Farm, Vacant Land, Commercial Egg Farm; West: Single-Family Residential	Solar Panels / Associated Transmission Facilities

<sup>\*</sup> The Project would be limited to approximately 26 acres on the two affected parcels which total approximately 66 acres.

## 3.1.3 Visual Quality Definitions

Visual quality is affected by the aesthetic characteristics of a particular area. Such aesthetic elements may include physical characteristics, as well as the perception of the viewer. Physical characteristics influencing the visual quality of an area may include such features as topography, landform, natural vegetation, water bodies, visual diversity, and visible coloring. Viewer perception is generally influenced by vividness, intactness, harmony, visual integrity, adjacent scenery, and/or visual unity. These elements all influence the overall evaluation of the quality of a particular view.

#### High Visual Quality

Areas with high visual quality may offer physical characteristics such as varying vertical relief; established natural vegetation with visually pleasing form, color, texture or pattern; water features; or, other elements that create a visually unified landscape. Particular views with high visual quality may include those with distinct focal points or patterns; enhanced or existing natural scenery; compatibility with the character of the surrounding landscape; and/or, a unique visual setting within the surrounding area.

#### Moderate Visual Quality

Moderate visual quality is generally considered to be represented by views that are interesting, but not visually exceptional with regard to landforms or other physical characteristics. Such views may consist of dominant types of vegetation; water features; colors within the landscape; or, other elements that visually unify a particular view or landscape. Contributing factors may include a varied composition that includes visual patterns created by landscape elements; enhancement of views from adjacent scenery; and/or, a visual setting that is distinguishable from, as well as visually similar to, views within the surrounding area.

#### Low Visual Quality

Low visual quality may be represented by areas with limited or no existing landforms or changes in topography; sparse or indiscernible vegetation types, due to density; absence of water features; monotonous color palettes; or, limited visual elements of varying visual interest. Visual quality may be considered to be low if views are varied, but visually disconnected; lack perceivable visual patterns; are adjacent to views that devalue the existing scenic quality; or, do not generally represent a visual setting that is common and/or valued within the surrounding area.

## 3.2 Project Viewshed

The viewshed is generally the area that is visible from an observer's viewpoint and includes the screening effects of intervening vegetation and/or physical structures. Viewsheds may occur from designated scenic viewpoints or from singular vantage points where an unobstructed view of visual components within the landscape exists. The viewshed is composed of such elements as topography and natural land features (i.e., hillsides, mountains) and other physical features within the landscape, such as buildings, vegetation, water features. Potential visual impacts within the viewshed may be affected by distance of the viewer from a site, the frequency and

length of views, the personal perception of the viewer, and physical and/or atmospheric conditions at the time viewing occurs.

The Project site is located along the valley floor which is visible from a variety of vantage points within the surrounding mountains. As such, the viewshed is generally defined by the surrounding mountainous topography that encircles the valley floor. Although this area is expansive, consideration of this viewshed provides the most comprehensive (largest) and conservative (worst-case) estimate of the area that could potentially be affected by the proposed Project. Refer to Figure 6, Viewshed/Landscape Units Map, which shows the viewshed in the area surrounding the Project. An approximate five-mile radius from the Project site was considered; however, as shown on Figure 6, views of the Project site would only occur from limited vantage points within this area (shown as shaded in green), due to area topography.

Within the viewshed, varied views of the valley largely occur from vehicles as they descend (or ascend and look back to the valley) and passengers in vehicles traveling within the valley. Visitors utilizing the trails or other recreational facilities within the Hell Hole County Canyon Preserve to the east may also have varied views to the Project site. Due to existing topography, the viewshed includes the surrounding, low-density development and undeveloped lands along the valley floor, generally bounded by the surrounding hillsides. Due to the generally flat topography of the valley floor and the limited, low-lying vegetation typical of the environment, views across the expansive valley from surrounding vantage points within the viewshed do occur; however, distance from the object being viewed and intervening development and geological features have the potential to reduce or restrict views.

Figure 6, Viewshed/Landscape Unit Map, shows the general limits of the viewshed and the landscape units considered within the viewshed as part of this analysis. To characterize the visual pattern elements that occur within the Project viewshed, a number of key view locations within the valley were identified and representative photographs taken. Key viewpoints are described in detail in Section 5.2, Key Views. Key vantage points within the viewshed offering views of the site occur from Cole Grade Road and Via Valencia, as well as outlying roadways along the surrounding hillsides. Due to the generally flat topography of the valley floor, views of the site from within the valley are generally obstructed by surrounding development and/or vegetation, and therefore, views are highly restricted.

Additionally, several roadways officially designated as scenic roads occur within the Project viewshed. State Scenic Highways are highways that are either officially designated by the California Department of Transportation (Caltrans) or are eligible for designation. This statewide system of scenic highways is part of the Master Plan of State Highways Eligible for

Official State Designation as Scenic Highways. Designation of a highway as "scenic" is dependent upon the visibility of the natural landscape to travelers, the aesthetic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. A highway's designation may change from "eligible" to "officially designated" if a local jurisdiction adopts a scenic corridor protection program, applies to Caltrans for scenic highway approval, and Caltrans subsequently designates the road as an official State Scenic Highway.

With regard to the Project, no designated scenic roadways are located directly adjacent to the site; however, State Highway 76 is designated as an eligible State Scenic Highway, but it is not officially designated as such. The Project site may potentially be intermittently visible from limited vantage points along the length of State Highway 76; however, as the roadway is located approximately 3.8 miles to the northeast of the Project site at its closest point, views of the Project would be greatly restricted due to distance, as well as intervening topography and development.

Within the study area, the County General Plan Conservation and Open Space Element identifies the following roads as County Scenic roadways within the vicinity of the Project site (refer also to Table 3, County Scenic Roadways, above):

- State Highway 76 from the City of Oceanside east to State Highway 79;
- Dilac Road and Valley Center Road (S6) from State Highway 76 to State Highway 76;
- Lake Wohlford Road from Valley Center Road east (Escondido City limits) to Valley Center Road (excluding portion within City of Escondido);
- W Vista Way, Gopher Canyon, and Old Castle Roads from Vista city limits north and east to Lilac Road.

Although the Project site may be visible from certain locations along these roadways, distance from the site, combined with intervening development and vegetation, topography, and (limited) difference in elevation between the viewing location and the Project site located along the valley floor, it is not anticipated that views of the Project site from these roadways would be substantially changed with Project implementation.

## 3.3 Landscape Units

A landscape unit is an area that can generally be defined by visual and physical characteristics and may be composed of a limited area (i.e., meadow) or a larger area (i.e., portion of a mountain range). The overall boundaries of a landscape unit may generally be defined by topography, natural vegetation, architectural design, landforms, or similar types of land uses.

Each landscape unit can be described individually and as varying from other adjacent landscape units. Each landscape unit is a portion of the regional landscape that often corresponds to a place or district that is commonly known among local viewers.

Several landscape units that may potentially be affected by construction of the proposed facilities have been identified. These landscape units are shown in Figure 6, Viewshed/Landscape Units Map, and are further described below.

## 3.3.1 Landscape Unit #1

Landscape Unit #1 consists of the SR 76 and Lilac Road/Valley Center Road (County Highway S6) corridors located to the east/northeast of the Project site. The SR 76 corridor generally runs east from I-15 and is located approximately 3.8 miles to the north/northeast of the site at its closest point. Although the character of the corridor changes along its length, the corridor is generally defined by the mountains that rise along its alignment, with the roadway running along the flatter portions of the valley floor. Additionally, S6 trends southward from SR 76 just to the east/northeast of the Project site. This roadway also runs along the valley floor, with mountains rising to either side; refer to Figure 6, Viewshed/Landscape Unit Map.

Within the study area, this Landscape Unit is generally bounded to the north, east/southeast, and west by the mountains that rise from the valley floor. This Landscape Unit supports a variety of natural vegetation typical of the environment, including low-lying scrub, groundcover, and annual grasses, as well as a mixture of established oaks and agricultural crops. As much of the vegetation and topography are similar throughout this area, landscape components do not generally offer strong, visually distinctive patterns to viewers, particularly when viewed at a distance.

## 3.3.2 Landscape Unit #2

Landscape Unit #2 consists of the mountains that generally encircle the valley in which the community of Valley Center and the Project site are located. This Landscape Unit includes portions of the Hell Hole Canyon County Preserve to the east (includes Rodriguez Mountain which reaches over 3,500 feet amsl), Daley Ranch to the southwest, and other mountains of varied terrain and elevation. The mountains are readily visible within the landscape and support visual components that combine in distinctive visual patterns; refer to Figure 6. These mountains serve as a dominant feature within the landscape and define the valley; however, due to their height and distance from the valley below, details within this landscape unit are generally diminished when viewed from public vantage points along the slopes and/or ridgelines.

### 3.3.3 Landscape Unit #3

Landscape Unit #3 consists of the developed areas along the valley floor which comprise the unincorporated community of Valley Center. This Landscape Unit is generally defined by the surrounding mountains that rise from the valley floor to the north, east, south, and west.

Within the Valley Center community, the valley floor is generally characterized by undeveloped lands, lands utilized for agricultural purposes, and lands with low-density rural-residential development, with higher densities occurring within the town "core." This Landscape Unit generally supports a mixture of single-family residential uses interspersed with relatively small-scale agricultural operations (typically citrus groves). Uses are generally one-two stories in height and low-lying within the landscape. Vegetation largely consists of a mixture of ornamental landscaping combined with natural vegetation, as well as small-scale agricultural uses such as orchards and row crops. This Landscape Unit offers somewhat varied topographical differences as compared to adjacent lands as the hillsides rise from the valley floor; refer also to Figure 2A, Local Vicinity Map.

### 3.3.4 Landscape Unit #4

Landscape Unit #4 consists of the alignment of Lilac Creek. As identified in the Valley Center Community Plan, this resource is identified as a County Resource Conservation Area (RCA) which is made up of Lancaster Mountain, Keys Canyon, and Lilac Creek. This long, narrow alignment supports important riparian and oak woodland habitat along the stream. Additionally, Lancaster Mountain, which lies approximately eight miles to the northwest of the Project site and outside of the two-mile radius of the study area, contains mixed chaparral and wildlife habitat. The Mountain is considered to be a scenic landmark.

### 3.3.5 Landscape Unit #5

Landscape Unit #5 consists of the alignment of Keys Creek, which is also identified in the Valley Center Community Plan as a County RCA. The alignment follows a long, narrow stream bottom trending generally from north to south, then east, and provides high-quality wildlife habitat including riparian and oak woodland habitat. Further, Keys Creek is considered to be a scenic community resource; refer to Figure 6.

# 4.0 Existing Visual Resources and Viewer Response

## 4.1 Existing Visual Resources

Land affected by the proposed Project is generally lacking in significant visual resources. The parcels do not contain any County-defined steep slopes (defined as having a slope with a natural gradient of 25 percent or greater and a minimum rise of 50 feet) or other significant topographical features. Topography of the Project area (and adjacent lands) is generally flat. Refer to Figure 2A, Local Vicinity Map; and, Figure 2B, USGS Quad Map.

Two ephemeral drainages traverse the central portion of the 66-acre property, south of Via Valencia, joining one another near the southern property boundary. The drainages support sparse riparian vegetation, including coast live oak woodland and Engelman oak woodland, as well as several palm trees. No rock outcroppings are present on any of the lands affected by the Project.

The majority of the site currently supports a fallow citrus orchard (orange trees); however, a large portion of the orchard is in a physically degraded state and therefore, does not represent vegetative habitat of high aesthetic value. Limited vegetation is present in the southern portion of the site as the orchard has largely been removed. As stated previously, several small structures and infrastructure supporting the former agricultural uses (e.g., storage sheds, temporary greenhouses, etc.) are present to the east of the MUP area and would remain.

## 4.1.1 Visual Character/Visual Quality

The dominant visual character of the Project site is that of generally level topography supporting varied vegetation (largely fallowed citrus crops). Although the citrus crops add to the visual character of the site, due to the fact that they are fallowed and that areas of the site are presently unplanted and barren, the visual quality of this element is somewhat reduced. Further, portions of the site are unplanted and are and barren and therefore do not exhibit views of high visual character or quality. As the existing structures on the site (e.g., storage sheds, temporary greenhouses, etc.) are utilitarian in nature and in support of the agricultural operations, they do not contribute to a high visual quality or character of the site.

#### Landscape Unit #1

Landscape Unit #1 consists of the SR 76 and Lilac Road/Valley Center Road (County Highway S6) corridors located to the east/northeast of the Project site. The SR 76 corridor is generally defined by the mountains that rise along its alignment, with the roadway running along the flatter portions of the valley floor. Additionally, S6 trends southward from SR 76 just to the east/northeast of the Project site. This roadway also runs along the valley floor, with mountains rising to either side.

Topography within this Landscape Unit is visually flat along the valley floor, with the mountains rising up to define the travel "corridors." This Landscape Unit supports a variety of natural vegetation typical of the environment, including low-lying scrub, groundcover, and annual grasses, as well as a mixture of established oaks and agricultural crops. As much of the vegetation and topography are similar throughout this area, landscape components do not generally offer strong, visually distinctive patterns to viewers, particularly when viewed at a distance. Limited elements of visual bulk, dominance, or scale occur within this Landscape Unit.

The components within this Landscape Unit do not offer a high degree of visual contrast, due to the nature of lands along the roadway alignments, and therefore, do not combine to create distinctive visual patterns. The landscape has a moderate degree of intactness, as it is generally free from competing visual elements.

## Landscape Unit #2

Landscape Unit #2 consists of the mountains that generally encircle the valley in which the community of Valley Center and the Project site are located. The mountains are readily visible within the landscape and support visual components that combine in distinctive visual patterns.

The topography of this Landscape Unit offers visual forms with varied visual bulk, mass, and shape. Colors are also varied, based upon viewing distance to the forms, sunlight and time of day, and texture of the surfaces. This Landscape Unit offers a sense of vividness and creates a memorable visual impression through varied geologic forms, particularly when influenced by sunlight.

The mountains create a sense of visual dominance within the valley and offer a visually diverse pattern of elements within the landscape. This Landscape Unit supports landscape components that combine in distinctive visual patterns and provide visual contrast to other surrounding lands and the valley floor. The mountains offer a unified and generally coherent visual pattern with few encroaching elements as they rise from the valley floor.

#### Landscape Unit #3

Landscape Unit #3 consists of the developed areas along the valley floor which comprise the unincorporated community of Valley Center. Within the Valley Center community, the valley floor is generally characterized by undeveloped lands, lands utilized for agricultural purposes, and lands with low-density development.

This Landscape Unit supports expanses of natural vegetation typical of the environment, including ornamental landscaping, low-lying scrub, sparse groundcover, and annual grasses, as well as a mixture of agricultural crops. Topography within this Landscape Unit is visually flat along the valley floor, creating a pattern with limited variation. Limited elements with visual bulk, dominance, or scale occur within this landscape.

This Landscape Unit does not offer strongly contrasting landscape components that combine to form striking or distinctive visual patterns, and therefore, a memorable visual impression is generally not created. The landscape is largely free from encroachment of competing visual elements, due to the nature of the topography and existing vegetation, and is therefore visually intact. A sense of visual unity is achieved, as components combine to form a generally visually coherent pattern. Few built components within this Landscape Unit contribute to a sense of bulk or mass; refer to Figure 6.

#### Landscape Unit #4

Landscape Unit #4 consists of the alignment of Lilac Creek. This resource is largely defined by the flatter portions of the valley floor through which the creek flows.

As a natural resource, no structures are present. Varied vegetation, including riparian and oak woodland habitat is present along the stream, and such natural habitat visible along the length of the alignment creates a recognizable element within the surrounding landscape setting of the valley floor.

No visual elements of significant mass, bulk, or scale are present within the landscape. Colors are generally of natural hues, with elements offering varied visual diversity and textures. The components within this Landscape Unit do not offer a high degree of visual contrast. The landscape has a moderate degree of intactness, as it is generally free from competing visual elements.

#### Landscape Unit #5

Landscape Unit #5 consists of the alignment of Keys Creek. The alignment follows a long, narrow stream bottom trending generally from north to south, then east, and provides high-quality wildlife habitat including riparian and oak woodland habitat. Keys Creek is considered to be a scenic community resource.

Although much of the vegetation is similar throughout this Landscape Unit, landscape components within certain areas offer visually distinctive patterns to viewers. Limited elements of visual bulk, dominance, or scale are present within this landscape. Lands within this Landscape Unit are generally similar with regard to color, due to vegetation along the alignment and the ground surface.

The landscape has a moderate degree of intactness, as it is generally free from competing visual elements. In addition, a sense of visual unity is evident, as the landscape components join together to form a coherent visual pattern.

# 4.2 Viewer Response

Viewer response is based on both viewer sensitivity and viewer exposure. These elements influence how a viewer may potentially respond to a change in the visual landscape, particularly with regard to development of a site from a generally undeveloped condition. Viewer response varies based upon the type of viewer and the characteristics of the visual environment that would ultimately be affected (i.e., urban versus rural environment, established large-scale commercial area versus low density residential uses, etc.). Viewer response is largely influenced by viewer sensitivity and viewer exposure, as described in greater detail below.

# 4.2.1 Viewer Sensitivity

Viewer sensitivity to a change in the visual environment can be influenced by a number of factors, including the awareness of the viewer, personal interest in a particular visual resource, and/or viewer activity during the time that views of a resource occur (i.e., vehicle driver versus passenger, active versus passive viewing). In addition, the particular goals or values of a community can influence the sensitivity of viewers to a particular site, land area, or viewshed. Viewer sensitivity may vary between those with a vested interest in a community (i.e., residents) versus those traveling through an area with little or no knowledge of the community or existing visual landscape. Based on these conditions, viewer sensitivity can be assigned a value of low, medium, or high.

It is likely that community members would be more sensitive to the Project than would those who experienced Valley Center as a tourist. In addition, viewer sensitivity may be higher among those who would experience views of the site more frequently, such as area residents to the south of the site. As views of the Project components would also vary due to distance from the site, as well as travel speed along area roadways and the degree to which one chooses to make an effort to view the site (e.g. turning of one's head), viewer sensitivity to a visual change within the landscape occurring as a result of the Project would further be influenced.

# 4.2.2 Viewer Groups

Viewer groups would mainly consist of those individuals traveling along Cole Grade Road, Via Valencia, and/or Wilhite Lane in the proximity of the Project site, due to the location of the site along the valley floor and relatively flat topography. Additional viewer groups may include travelers along other public roadways in the area where views occur at a higher elevation than the Project site; however, such views would be distanced from the Project site. Visitors to the Hell Hole Canyon County Open Space Preserve and other mountains in the surrounding area may also experience views to the site from varied vantage points.

Additional viewer groups may include residents and/or occupants viewing the Project site from surrounding residential uses (particularly at a higher elevation than the site) to the north, southeast, and west; agricultural uses to the south and west; and/or, properties directly adjacent to the Project site; however, such views of the Project from these vantage points would generally occur from privately-owned properties and not public viewpoints. With exception of those properties immediately adjacent to the site, views from these private ownerships would generally be decreased due to distance and intervening vegetation and development.

# 4.2.3 Viewer Exposure

A limited number of public roadways are present in the area surrounding the Project site. Potential views into the Project site from vehicles traveling along adjacent roadways would be limited, due to distance to the proposed development areas, height of the Project components, travel speeds, and the angle of the view with respect to the viewer (i.e., forward-looking versus turning one's head and looking back towards the subject property). Views of the site from other public roads at greater distances may occur, but would also be limited.

In determining the potential exposure of each viewer group, several factors are considered. These include the overall number of viewers experiencing visual changes to the resource as the

result of the proposed development; how long views would last; the anticipated speed at which viewers would be traveling; and, the relation and distance of the viewer to the particular site.

Table 5, Viewer Groups and Anticipated Exposure, summarizes the anticipated viewer groups and the potential viewing experience of each.

TABLE 5
VIEWER GROUPS AND ANTICIPATED EXPOSURE

Anticipated Viewer Group	Number of Anticipated Viewers	Key Views	Approximate Distance to the Project Site	Anticipated Views with Project Implementation	Sensitivity	Duration of View
Drivers along Cole Grade Road	Estimated 1,000 people per day	#1. #2, and #5	Adjacent	Obscured or highly restricted, intermittent views of solar panels and associated infrastructure	Medium	Varies / 0-10 seconds / Landscape screening proposed; however, intermittent views may occur at various vantage points along the Project frontage
Drivers along Via Valencia	Estimated less than 500 people per day	#3 and #4	Adjacent	Intermittent views of solar panels and associated infrastructure	Low to Medium	Views Obscured
Drivers along Wilhite Lane	Estimated less than 200 people per day	N/A	Adjacent	Intermittent views of solar panels and associated infrastructure	Low to Medium	Views Obscured
Hell Hole Canyon County Open Space Preserve	Estimated 100 to 200 people per day (depending on season)	N/A	Far Distance / Approximately 4.5 miles	Views of solar panels and associated infrastructure	Low	Varied
Surrounding Private Residential Uses	Varied	N/A	Adjacent / Varied	Screened views of Project site / Intermittent views of solar panels and associated infrastructure / transmission lines	High to Low	Varied

#### 4.2.4 Viewer Awareness

Viewer response is affected by the degree to which a viewer is receptive to visual details, character and quality of the surrounding landscape. A viewer's perception is affected by his/her activity and the degree to which he/she actively participates in noticing a change in the visual environment.

Viewer awareness to potential visual changes in the setting that may occur with the Project would be varied. A viewer would first need to be in a location within the surrounding area where the Project site was visible (e.g. from a higher elevation), then actively notice that a change in the visual landscape has occurred. Viewer awareness would also vary between local residents and those who are experiencing the area as a tourist, wherein the local residents would likely be more aware of a change in the visual environment. In addition, viewer awareness would also vary due to distance from the proposed solar facilities, as views occurring at a greater distance would diminish the visibility of the Project components within the visual landscape.

# 5.0 Visual Impact Assessment

# 5.1 Guidelines for Determining Significance

The California Environmental Quality Act (CEQA) Guidelines define "environment" to include "objects of…aesthetic significance (Section 15360)." As such, the County of San Diego has identified thresholds of significance to assess potential impacts resulting from proposed development.

The following significance guidelines are intended to provide guidance in the evaluation of whether a significant impact to visual resources would occur as a result of project implementation. A project will generally be considered to have a significant effect if it proposes any of the following:

- Introduction of features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines;
- Removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings;
- Substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, a trail within an adopted County or State trail system, a scenic vista or highway, or a recreational area; or,
- The project would not comply with applicable goals, policies or requirements of an applicable County Community Plan, Subregional Plan, or Historic District's zoning.

# 5.2 Key Views

Several key views of the Project site from surrounding public vantage points were identified for the Project; refer to Figures 7A to 7E, Visual Simulations, which illustrate existing and proposed views of lands affected by the Project.

As the Project site is located in the valley where terrain is generally flat, views to the site from surrounding locations along the valley floor do not occur or are highly restricted due to similar elevation. As one begins to ascend the surrounding hillsides, the potential for the Project site to become more visible would increase; however, as the hillsides are distanced from the Project site, views of the Project elements would decrease due to distance, intervening development, topography, and established vegetation. As such, the key views considered in this analysis are those that would potentially occur to travelers along the adjacent roadways of Cole Grade Road and Via Valencia, as well as from surrounding roadways located at a higher elevation than the Project site looking down to the valley below. As described below, views of the Project from these public vantage points would be obscured or limited by distance from the site, travel speeds, angle of the view (i.e., looking directly to the site or turning one's head to look back to the site), and intervening vegetation or development.

# 5.2.1 Key View #1 – Cole Grade Road/Via Valencia Looking Northeast (Not a Part of Proposed Project)

Views from this location would occur to travelers looking northeast from the intersection of Cole Grade Road/Via Valencia; refer to Figure 7A, View 1 (Visual Simulation) — View from Cole Grade Road/Via Valencia Looking Northeast, which shows the existing view from this location. Viewers from this vantage point would mainly be passengers in vehicles traveling in either direction along Cole Grade Road. This parcel of land was originally part of the proposed Project; however, it is no longer a part. Discussion of this viewpoint is included herein to provide an understanding of the existing setting surrounding the Project site.

Views along Cole Grade Road in the Project vicinity generally consist of citrus orchards and rural-type single-family residential uses, some with small-scale agricultural uses. As lands along this roadway within the valley are generally flat, views are typically limited to immediately adjacent properties, as views across the valley or to the surrounding hillsides are generally restricted by intervening development and established vegetation.

From this vantage point, the existing citrus orchard on the parcel adjacent to the north of the Project site would be visible. The trees are planted in repeating rows, set back from the edge of pavement by approximately 20-25 feet; refer to Figure 7A. The trees are generally not of substantial height and typically grow to 10-15 feet. The density of the trees and the visible depth to which they are planted onsite generally prevents views into this property.

The orchard presents a dominant visual feature in the foreground as one travels along the roadway; however, similar citrus orchards and other crops are planted along Cole Grade Road on adjacent properties and therefore, does not represent a unique visual feature within the landscape. Although this Landscape Unit supports visual components that combine in distinctive

visual patterns, it does not offer a high degree of visual contrast with regard to adjacent lands along the valley floor.

From this vantage point, the existing visual landscape offers somewhat memorable landscape components and distinctive visual patterns (although similar to adjacent orchard uses), and therefore, visual quality and character are considered to be medium.

Glimpses of the Project site to the south of Via Valencia would be experienced by drivers along Cole Grade Road from this vantage point (see also Key View #2, below). The Project proposes additional landscaping adjacent to Via Valencia, thereby screening views from the roadway into the area that would be developed with the PV solar panels; refer to Figure 3D, Conceptual Landscape Plan. As such, views of the development would be limited from this location. Although views to the site would change as one travels along the roadway, viewer response is anticipated to be low, as the Project features would be set back from the road and would be screened, thereby requiring a passenger to actively turn his head to look into the site to see the Project components; refer to Figure 7A.

# 5.2.2 Key View #2 – Cole Grade Road/Via Valencia Looking Southeast

Key View #2 is the view of the Project site looking southeast to the site from the intersection of Cole Grade Road and Via Valencia; refer to Figure 7B, Key View 2 (Visual Simulation) — Cole Grade Road/Via Valencia Looking Southeast, which shows existing and proposed views from this vantage point. Viewers from this location would mainly be passengers in vehicles traveling in either direction along Cole Grade Road.

Views along this roadway within the Project vicinity generally consist of citrus orchards and rural-type single-family residential uses mixed with small-scale agricultural uses. Views from this vantage point are generally restricted due to the lack of elevation change as compared to other properties along the valley floor, in addition to intervening development and mature landscaping.

From this vantage point, the southern portion of the Project site where citrus orchard is planted is visible; however, the citrus crops on the southern portion of the Project site are distanced from the roadway, and large areas of the parcels remain unplanted. The trees are generally not of substantial height (typically 10-15 feet). The density of the trees and the visible depth to which they are planted onsite varies and affects the extent to which views extend into the interior of the site.

From this vantage point, the foreground is largely unplanted and therefore, undeveloped or lands or fallowed crops are visible. Planted row of citrus crops are visible in the middle and background, as one looks deeper into the interior; however, areas of undeveloped land or fallowed crops are also visible. Views of similar citrus orchards and other crops along Cole Grade Road on adjacent properties are also experienced from this vantage point, and therefore, the orchard on the Project site does not represent a unique visual element, nor does it offer a high degree of visual contrast with adjacent lands.

Views of the Project site from this vantage point are brief and are influenced by travel speeds and the extent of the Project's frontage along Cole Grade Road. Views would largely consist of the orchard and relatively level topography in the foreground. The existing visual landscape as viewed from this vantage point offers a somewhat memorable landscape with distinctive visual patterns (although similar to orchards found on surrounding properties). As such, the visual quality and character of the view are considered to be medium.

The Project design would allow for several rows of existing orange trees to remain adjacent to Cole Grade Road. Additionally, the Project proposes the planting of additional landscaping offset from the existing rows of trees, to further screen views of the proposed Project components(PV solar panels and related infrastructure); refer also to Figure 3D, Conceptual Landscape Plan). As such, views of the proposed development would be limited from this location following Project implementation; refer to Figure 7B. Although views into the property from this vantage point would vary, viewer response is anticipated to be low, based on similarity to other surrounding properties that exhibit similar uses (orchards) and landscaping treatments.

Additionally, based on the technical evidence evaluating the reflectivity of the PV solar panels, the proposed Project would not install highly reflective building materials that would result in a substantial increase in light or glare that would affect the surrounding area or that would produce reflective light that would create adverse disability or discomfort glare. The proposed Project as designed would be in accordance with the County's Guidelines of Determining Significance for Lighting and Glare.

# 5.2.3 Key View #3 – Via Valencia Looking South

Key View #3 is the view of the Project site looking south to the site from Via Valencia, located north; refer to Figure 7C, Key View 3 (Visual Simulation) — Via Valencia Looking South, which shows existing and proposed views from this vantage point. Viewers from this location would mainly be passengers in vehicles traveling in either direction along Via Valencia.

Views from this vantage point would be to the south through a number of privately-held properties, several of which are developed with single-family residential units. Other parcels remain undeveloped. Lands adjacent to the south of Via Valencia (intervening between the roadway and the Project site) support relatively level lands with some gentle slopes occurring in places; refer to Figure 7C. Varied topography is generally visible in the foreground from this location, along with established vegetation that limits views further to the south (Project site). Limited views of the mountains in the background are afforded.

Views from this vantage point are largely restricted to that of the lands in the vicinity of Via Valencia due to the existing mature vegetation, and an associated lack of visual detail or coherence of the landscape components is experienced; refer to Figure 7C. Therefore, the visual quality and character of this Key View are considered to be of low.

Views of the PV solar panels and Project components from this roadway would largely be obscured, due to the height and scale of the proposed elements and established vegetation or existing residential development. Although views of the Project site from limited locations along this roadway may occur, they would be distanced from the site and would be highly restricted, thereby minimizing Project details within the visual landscape. Further, experiencing views of the Project site from this vantage point would also require the viewer to physically turn one's head and look southward to the site within the surrounding visual setting. As such, viewer response is anticipated to be low.

# 5.2.4 Key View #4 – Via Valencia/Wilhite Lane Looking Southwest

Key View #4 is the view of the Project site looking southwest from Via Valencia/Wilhite Lane to the Project site; refer to Figure 7D, Key View 4 (Visual Simulation) — Via Valencia/Wilhite Lane Looking Southwest, which shows existing and proposed views from this vantage point. Viewers from this location would mainly be passengers in vehicles traveling within the vicinity of this intersection.

Similar to Key View #3, views from this vantage point would through the row of privately-held lands located between Via Valencia and the Project site. Undeveloped lands and single-family residential uses are present. Such lands are relatively flat with some variation in topography (gentle slopes). Limited views of the mountains in the background are afforded. The existing visual landscape does not offer memorable landscape components or distinctive visual patterns, and therefore, visual quality and character are considered to be low.

From this vantage point, views of the Project site would be obscured, due to established natural vegetation on adjacent lands. Views would largely consist of a variety of mature vegetation and relatively level topography in the foreground, with limited views of the mountains in the background; refer to Figure 7D.

As the Project site would not be visible from this vantage point, viewer response to the visual change in the landscape is anticipated to be low. Although highly restricted and brief views of the site may occur as one travels away from the intersection of Via Valencia/Wilhite Lane, due to travel speeds and intervening lands, it is not anticipated that installation of the Project components would significantly heighten viewer response or detract from the existing visual quality or character.

# 5.2.5 Key View #5 – Cole Grade Road Looking Northeast

Key View #5 is the view of the Project site looking northeast from Cole Grad Road into the Project site; refer to Figure 7E, Key View 5 (Visual Simulation) — Cole Grade Road (Looking Northeast), which shows existing and proposed views from this vantage point. Viewers from this location would mainly be passengers in vehicles traveling within the vicinity of the site along Cole Grade Road.

Similar to Key View #2, views along this roadway within the Project vicinity generally consist of citrus orchards and rural-type single-family residential uses mixed with small-scale agricultural uses. Views from this vantage point are generally restricted due to the lack of elevation change as compared to other properties along the valley floor, in addition to intervening development and mature landscaping.

From this vantage point, the southern portion of the Project site where existing vegetation is lanted is visible; however, the citrus crops on the southern portion of the Project site are distanced from the roadway, and large areas of the parcels remain unplanted. The trees are generally not of substantial height (typically 10-15 feet). The density of the trees and the visible depth to which they are planted onsite varies and affects the extent to which views extend into the interior of the site.

From this vantage point, the foreground is largely undeveloped lands and fallowed crops are visible in the background, as one looks deeper into the interior; however, areas of undeveloped land or fallowed crops are also visible. This view does not offer a high degree of visual contrast with adjacent lands; refer to Figure 7E.

Similar to Key Views #1 and #2, views of the Project site from this vantage point are brief and are influenced by travel speeds and the extent of the Project's frontage along Cole Grade Road. Views would largely consist of the orchard and relatively level topography in the foreground. The existing visual landscape as viewed from this vantage point offers a somewhat memorable landscape with distinctive visual patterns (although similar to orchards found on surrounding properties). As such, the visual quality and character of the view are considered to be low.

The Project design would allow for several rows of existing orange trees to remain adjacent to Cole Grade Road. Additionally, the Project proposes the planting of additional landscaping offset from the existing rows of trees, to further screen views of the proposed Project components (PV solar panels and related infrastructure); however, limited views of the solar panels may occur from this vantage point, particularly due to the fact that the road is at a slightly higher elevation than the site, allowing for brief glimpses of the panels from the roadway. As such, views of the proposed development would be limited from this location following Project implementation; refer to Figure 7E. Although views into the property from this vantage point would vary, viewer response is anticipated to be low, based on similarity to other surrounding properties that exhibit similar uses (orchards) and landscaping treatments.

# 5.2.6 Hell Hole Canyon Open Space Preserve

Views from the Hell Hole Canyon County Open Space Preserve (mentioned herein, but not analyzed as a Key View), located approximately 4.5 miles to the east of the Project site may offer intermittent views across the valley to the Project; refer to Figure 6. Viewers from this location would mainly be passengers in vehicles traveling within the Preserve, or visitors utilizing the trails or other recreational facilities within the Park.

Varied topography and geological features are visible in the foreground with expansive views of the valley floor in the middle ground. Developed areas of Valley Center, surrounding undeveloped lands, and a variety of geological and topographical features also occur in the background. Views from this vantage point are generally considered to be of medium visual quality and character. Unique features within the landscape are visible, and an established visual pattern and compositional harmony is created by such elements within the foreground. Although visible, views of the Project site would be limited from this vantage point, due to the distance from the Project and the relative height and size of Project-related features. In addition, intervening vegetation and existing development would also reduce views of the Project site, thereby minimizing its visibility. More visibly noticeable features within the landscape would likely attract a viewer's attention. Viewer response to the visual change in the landscape is considered to be low.

# 5.2.7 Surrounding Private Residential Uses

As the Project site is located along the valley floor, a number of private residential homes within the surrounding area may have limited views of the site, particularly those residences located immediately adjacent to the site or at a higher elevation. Such views of the Project site would be varied, depending on proximity to the site, viewing angle, and intervening development, vegetation, and/or topographical features. Per CEQA requirements, the potential effects of a project on existing visual resources are generally analyzed with regard to how views from public vantage points would be affected; however, views from private residential uses within the Project area are considered briefly herein to ensure that potential visual effects are effectively minimized or avoided to the extent feasible.

The Project site is located adjacent to several single-family residential uses; refer to Figure 5D, Surrounding Land Uses. Views into the site from these residences are varied, depending upon where the residence is located. For example, views from the residences located adjacent to the northern property boundary (south of Via Valencia) are generally of the existing citrus orchards. The neighboring residential uses to the east also experience views of the onsite orchards; however, views of the site occur at a distance, as the residences is located in the central portions of the properties and not adjacent to the proposed Project boundary and/or are further obscured by existing orchards on the parcels. Views into the site from the residences directly to the north of the Project, adjacent to the east of Cole Grade Road, are generally blocked by the established vegetation along an existing drainage, and further by the onsite citrus orchards.

Furthermore, views of the Project site presently occur from residential uses located within the surrounding area. As the valley floor is generally flat, considered with existing elements within the visual landscape (e.g. development, vegetation, etc.), views of the Project site are largely blocked from such residential uses located along the valley floor; however, those residences located at a higher elevation may experience views of portions or all of the site.

With implementation of the proposed Project, the majority of the site would be developed with the proposed PV solar arrays which may be visible from surrounding offsite residential uses; however, such views would be restricted due to existing development, existing vegetation, and proposed landscaping. Views from residences located immediately adjacent to the property boundaries would generally be of the PV solar arrays; however, a variety of vegetative screening (in combination with retention of some existing citrus trees) is proposed along portions of the property boundaries adjacent to Cole Grade Road and Via Valencia in order to restrict views into the site from these offsite vantage points; refer also to Figure 3D,

Conceptual Landscape Plan. Existing views from offsite residential uses located at higher elevations would generally not be affected by the proposed perimeter landscape screening, as the Project components within the interior of the property would be visible; however, due to distance to the site from such locations and the limited height of the proposed PV solar panels and other Project structural elements, the Project components would not be highly visible within the surrounding visual landscape.

# 5.3 Assessment of Visual Character and Visual Quality

#### 5.3.1 Assessment of Visual Character

Natural landforms, natural vegetation, and a mixture of agricultural and single-family residential uses, as well as large parcels of undeveloped land, exist in the area surrounding the Project; however, such visual components would generally not be adversely affected by the proposed development. The Project has been designed to minimize grading requirements, thereby leaving the topography of the site largely in it is existing condition.

Construction would occur on the site and would generally be limited in visibility to surrounding parcels, and with restricted views from Cole Grade Road and Via Valencia. The Project would change the composition of the visual pattern in the existing onsite setting. The onsite physical character (citrus crops, vacant land, and small-scale supporting structures; colors; visual diversity) would be altered with installation of the solar panels and associated facilities; however, with consideration of varied views to the site from offsite properties and travelers along nearby public roadways, the visual changes resulting from the Project would not dominate or substantially change the existing visual pattern of the area, nor would the Project incorporate elements that would substantially obstruct or diminish existing views from offsite public vantage points; refer to Figures 7A to 7E.

Similar industrial and agricultural type elements exist within the surrounding area and support structural elements of similar or greater size, height, and/or appearance. Such elements may include large barns (e.g. poultry farms), facilities for animal keeping/raising, grain silos, and other similar structures. As visibility of the site would be reduced with retention of portions of the existing citrus crops and additional landscape screening along Cole Grade Road and Via Valencia, an adverse change to the overall character of the existing visual pattern through the introduction of elements that would create visual dominance or scale is not anticipated with the Project. The Project would not significantly change the visual character of the landscape, as the

proposed structural elements would be of limited bulk, mass, and scale, and views would generally occur from a distance. As such, the Project design would not substantially change the visual character of the landscape.

# 5.3.2 Assessment of Visual Quality

The visual quality of a view is partially influenced by the viewing location from which public views occur. The viewing location can allow for views that are generally either expansive in nature or focused on a specific view of a site or particular feature within the landscape. In addition, visual quality is influenced by the particular characteristics of the viewing corridor within which a view occurs. Visual quality is also affected by the quality of the overall viewshed area being viewed. Areas identified as having high visual quality are those which are identified as being sub-regionally important and possessing high scenic value.

The visual quality of the Project site would be potentially affected during the construction phase of the Project. Views of the site may include grading and construction activities, presence of construction vehicles and workers, and storage of building materials. Existing vegetation would provide some visual screening of the site from offsite public viewing locations; however, construction impacts on visual quality would be temporary and short-term, and would ultimately be reduced when construction is complete. Once the construction phase ceases, no other changes to the visual landscape would occur, as no other development or improvements are proposed; however, the proposed landscape screening along portions of the perimeter fencing on Cole Grade Road and Via Valencia would continue to mature over upcoming years, thereby resulting in minor changes to the visual setting.

As described above, views of the property from Cole Grade Road are afforded, as the roadway runs adjacent to the Project frontage. From this location, the Project site presents a landscape that is somewhat visually intact, in particular due to the existing citrus orchard that can be seen either along the frontage or at a distance from the roadway within the site. Due to the nature of the onsite vegetation and the visual character of adjoining lands, the site is generally considered to have a sense of visual harmony with adjacent lands. Visual diversity is generally low, as views largely consist of the orange trees, with limited elements or features that disrupt the visual landscape, and no visually significant natural or topographical features. As such, the affected lands are generally considered to have a medium visual quality; however, they are not considered to be subregionally important or possessing a high scenic value. Additionally, several rows of citrus trees would remain with the proposed Project (and enhanced through additional proposed landscape plantings for screening purposes), and therefore, the visual quality of the

site would not significantly change as the result of the proposed improvements. Improvements in this portion of the site would not significantly affect the existing visual quality of the area.

Views of the site along Via Valencia would be limited and brief or obscured from view due to established natural vegetation on adjacent lands, intervening land uses, and travel speeds. This area supports a variety of vegetation, but is generally void of any landscape components of visual significance. This area is not considered to possess landscape components that create distinctive visual patterns or possess high visual quality. As such, views from lands potentially affected along Via Valencia are generally considered to have a low visual quality and are not considered to be subregionally important or possessing a high scenic value. Improvements proposed that would potentially be visible from Via Valencia would not significantly affect the existing visual quality of the area. As the lands affected by the Project would be cleared and grubbed, onsite vegetation following Project implementation would be minimal. Landscaping for screening purposes is proposed along portions of the northern property boundary, in combination with retaining several rows of existing citrus trees, to enhance the visual quality in areas where the site may otherwise be visible; refer to Figure 3D, Conceptual Landscape Plan. As such, the visual quality would be further enhanced following completion of the construction phase through the maturing of the proposed landscape screening; however, as the existing visual quality of the affected parcels (or views from Via Valencia) is not considered to be high, installation of the PV solar panels would not significantly reduce the overall existing visual quality of the Project site. It is therefore not anticipated that the Project would significantly degrade the existing visual quality of the lands affected by the Project or of surrounding lands.

# 5.4 Assessment of Viewer Response

Viewer response to visual changes on the Project site with development of the PV solar facilities is anticipated to be varied, dependent upon the Project facilities being viewed and the location of the public vantage point. Viewer response during the construction phase may be greater because grading activities, construction equipment, and varying stages of panel installation may be visible from public roads within the Project vicinity. Once construction is completed, no other changes to the visual landscape would occur, as no other development or physical improvements are proposed; however, the proposed landscaping for screening purposes would continue to mature over time.

Several rows of orange trees would be retained along the roadway frontage of Cole Grade Road and Via Valencia with Project implementation and additional landscaping would be planted along the exterior of the fence, thereby further screening the Project components from view

for travelers along the road. As a result, views into this portion of the site would be greatly reduced and intermittent. Viewer response to views of this area of the Project would be low, due to distance from the Project elements, intervening vegetation, and travel speeds; refer to Figure 3A, Major Use Permit Plot Plan. Additionally, the Project frontage along Via Valencia is limited to the east-west segment adjacent to Cole Grade Road, thereby reducing the length of time that the site would be visible when traveling along the road. As mentioned above, the site would further be screened from view from Via Valencia by existing citrus trees and proposed landscape screening to be planted adjacent to the roadway along portions of the Project frontage, consistent with the Valley Center Design Guidelines. As the proposed Project elements (inverters/transformers, PV solar panels) would not exceed 12 feet in height, as measured from the ground surface, the Project components would not exceed the height of the proposed landscaping (mature) when viewed from the road, thereby minimizing their visibility within the landscape. Similar to views along Via Valencia, viewer response to improvements made in this area of the Project site are anticipated to be low, due to distance from the roadway, intervening vegetation, and travel speeds.

Views to the Project site from offsite vantage points within the community would generally be reduced or blocked due to intervening development and established vegetation and minimal differences in elevation (generally flat viewing plane), and therefore, viewer response would be low. Viewer response from more distant locations would also be low, even at higher elevations, such as from the mountains located to the north and east of the site or within the Hell Hole Canyon County Open Space Preserve, as the Project would not represent a significant visual feature within the visual landscape due to viewing distance and existing vegetation and other development along the valley floor.

As designed, the Project would underground the utility lines between the solar panels within the interior of the site. These lines would extend to the switchgear pad; refer to Figure 3A, Major Use Permit Plot Plan. From the switchgear pad, the line would be undergrounded to an existing SDG&E utility pole supporting a 12 kV (overhead) distribution line within the Cole Grade Road right-of-way. Where the line meets the existing utility pole, the line would be extended aboveground to connect to the existing SGD&E distribution line; refer to Figure 3A, Major Use Permit Plot Plan. Such utility poles are already present within the visual landscape, and the Project would not result in the installation of new poles within the existing utility easement that would have the potential to contrast with current views or increase viewer response to such changes in the visual setting.

Overall, the proposed improvements may be intermittently visible from certain locations along Cole Grade Road and Via Valencia. Limited views may also occur from public vantage points

within the surrounding valley and the adjacent County Preserve. As such, viewer exposure would be limited. Viewer sensitivity to the change in the visual setting would likely be low due to the limited number of viewers, the height of the Project components, and distance from such public vantage points to the Project site. As a result, viewer response to the proposed facilities would be lessened, as a substantial change in the existing visual landscape would not occur.

# 5.5 Determination of Significance

 Introduction of features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines.

As a discretionary project, the proposed Project is subject to the adopted Valley Center Design Guidelines. The Project proposes installation of an (up to) 8-foot high chain link fence along the perimeter of the development area. Section 4, Design of the Road Edge, of the Design Guidelines indicates that chain link fences and fences over 42 inches high are not acceptable along Cole Grade Road. The Project as designed would retain several rows of citrus crops along the frontage on Cole Grade Road to minimize disruption of the existing visual appearance of the site. In addition, landscaping will be planted outside of the fence to further screen the chain link fence from view from this roadway. Therefore, although the Project would not conform to the Design Guidelines with regard to the suggested fence type and height, the proposed enhancements would minimize and/or fully obscure views of the fence from Cole Grade Road. Refer also to Figures 7A and 7B which provide visual simulations of the Project as constructed from vantage points along Cole Grade Road.

#### Location / Lot Size

In the Project vicinity, parcels are generally large-acre parcels with low-density uses. A number of smaller parcels are located immediately to the west, north, and southeast of the Project site. Smaller lot sizes are evident within the more developed areas of Valley Center. The Project does not propose to subdivide or change the existing size of any of the parcels affected by the proposed improvements, and therefore, would not create lot sizes that were inconsistent with the existing visual character of lands in the surrounding area.

#### Architectural Design / Theme

Architectural design of structures on parcels surrounding the Project is varied, due to a mixture of use types. Residential uses in the area typically exhibit ranch-style features with wooden exteriors and roofing, and generally non-decorative elements. A number of area residential uses are constructed in the Spanish style, with stucco exteriors, tile roofing, and arched features. Surrounding agricultural-type uses generally exhibit more utilitarian features with minimal architectural design.

The Project would involve installation of the solar panels on the three subject parcels, with supporting infrastructure that includes small-scale structures to house the inverters/transformers and switchgear equipment. As the Project represents a utility use, Project components would be utilitarian in nature and would not represent structural features such as residential or commercial buildings that would require detailed architectural design or design features intended for visual enhancement. Architectural design of the proposed facilities is not anticipated to significantly contrast with the visual character of other uses found in the surrounding area. The architectural design of Project elements would not result in features that are visually dominant within the visual landscape, or that represent a scale that would significantly contrast with the existing visual character or disrupt the visual intactness or unity of the landscape.

#### Materials and Colors

Development on lands within the surrounding area generally exhibit a range of materials and colors, depending on the land use considered. Materials generally range from metal, wood, stucco, and concrete block for the limited residential and commercial uses. Metal and/or stucco structures are typical of area industrial- and agricultural-type uses. Exterior colors of area structures are typically earthtoned in nature.

#### Solar Panels

The solar panels would generally range from black to gray in color and would be highly absorptive. The materials used to construct the panels are designed to minimize the potential for reflection and retain as much of the solar spectrum as possible, thereby reducing glare. Metal piers (or other support structures) used for installation of the solar panels would be galvanized or painted to minimize reflection of light from the surface and to respect the natural setting. Additionally, the potential for glare effects from the Project would be further minimized, as all solar panels would be coated with a non-reflective coating.

#### Inverter/Transformer/Breaker Equipment

Equipment pads would be constructed within the solar panel field to house the inverters/transformers and switchgear. The structures would be constructed of non-flammable materials (i.e., steel) coated with a non-reflective earthtone finish. Roofing for these structures would also be metal and coated with a non-reflective earthtone finish to reflect the visual character of the surrounding natural environment. To ensure that the potential for glare effects to occur as a result of the Project, such measures would be made a condition of approval with adoption of the MUP Plot Plan.

Overall, the Project elements would respect the existing visual character and visual quality with regard to materials and color. No Project design features are proposed that would sharply visually contrast with surrounding elements, or that would create a visually dominant feature within the landscape.

#### Height / Square Footage

A limited number of small-scale, single-family rural residential uses and several commercial uses are present within the immediate Project vicinity. Such structures are generally one to two stories in height. Limited agricultural uses on surrounding lands support structural elements that generally range from 7 to 12 feet in height, with various elements of greater height, depending on their function.

Square footage of buildings in the area varies, due to the type of use, with residential uses generally of smaller scale (one to two stories) and commercial and agricultural-type uses supporting structures of greater square footage.

#### Solar Panels

Due to the limited height of the solar panels (approximately 12 feet maximum as measured from ground surface) and the relatively flat topography of the three affected parcels (minimal Project grading required), the visibility of the panels within the landscape would be reduced. Although sensitive land uses (e.g., residential uses) are located within the immediate area surrounding the affected parcels to the north, southeast, and west, in general, views to the site from developed properties and/or roadways would be distanced from the Project components, thereby limiting views of the panels.

#### Inverter/Transformer Equipment

A total of three equipment pads would be constructed within the solar panel fields to support the inverters/transformers; one of the three equipment pads would support the switchgear. The equipment would be approximately 10 feet in height when measured from the top of pad. The equipment would be constructed of non-flammable materials (i.e., steel).

#### Transmission Facilities

The Project proposes to connect to an existing aboveground utility line to the west of the site within the Cole Grade Road ROW. The Project does not propose the replacement or increase in height of any existing utility poles that would be affected by the Project. Therefore, no change in the visual landscape would occur in this regard.

#### Bulk and Scale

An evaluation of bulk and scale includes an analysis of the visual appearance of structures, relative to other existing development in the surrounding area. Visual bulk and scale of surrounding structures varies depending on the type of use. Residential uses tend to be of smaller scale (generally one to two stories in height) and visually horizontal in nature. Many of the residential uses in the Project area are single-family homes of average square footage, and therefore, are of limited scale and bulk. Similarly, the majority of commercial uses within the area, which are generally located further to the south along Cole Grade Road, are similar in scale and bulk to that of a single-family home, and are generally low-lying within the visual landscape (generally one story). Agricultural, service-type, and industrial-type uses generally support structural elements of greater bulk and scale within the visual landscape (e.g. storage facilities, sheds, barns, churches, schools, community facilities) that are generally of a greater square footage and height than a single-family home.

It is anticipated that the apparent visual bulk and scale of the proposed Project facilities would generally be consistent with that of surrounding uses, due to the design requirements of the solar facilities and associated infrastructure, structural/equipment heights, and required development regulations of the applicable zone.

The PV panels would be mounted on a single-axis tracker. The center axis of the single-axis trackers would have a nominal height of three feet above grade; refer to Figure 3B, Major Use Permit Plot Plan (Details). The PV panels would rotate through a 90 degree arc during the day. The maximum height of the top of panel would measure an average of seven feet at full tilt; however, in certain cases where the ground undulates under the panels, the panel height could reach a maximum of approximately 12 feet as measured from the ground surface. The panels themselves would be approximately 39 inches long by 77 inches long.

The direct current (DC) power generated by the PV panels would be transmitted via underground cable to two inverter/transformer pads and one switchgear pad located within the proposed onsite development area, where the DC power would be converted to alternating current (AC) power. Each inverter/transformer equipment pad would be approximately 10 feet wide by 32 feet long; the switchgear pad would be approximately 7.5 feet wide by 8.5 feet long. The equipment installed on the pads would measure a maximum of approximately 10 feet in height (above pad elevation), or 12 feet in height as measured from the ground surface.

As such, the solar panels and equipment would be generally low-lying within the landscape and would not be of significant scale. Further, as compared to other elements within the surrounding visual landscape (e.g. residential units or support structures for agricultural-related uses), the panels would not represent elements of significant bulk. The panels themselves would be of a minimal thickness and would support the mechanisms required for collection of energy from the sun.

In addition, the inverter/transformer equipment would be dispersed within the overall acreage of the parcels. The Project would range between approximately seven feet (PV panels) to twelve feet (inverters/transformers mounted on building pad) in height. As these facilities would be relatively low-lying within the landscape and limited in height, they are not considered to be of significant scale that would be inconsistent with surrounding land uses or community character.

The proposed Project components would not represent elements that would detract from the existing visual character or quality of the site or that would significantly dominate or differ in size from existing components within the landscape. Furthermore, the visibility of the Project components would be reduced due to existing vegetation along the valley floor, relatively level topography of the valley floor (flat viewing plane), and distance of the site from potential public vantage points in the surrounding area.

## **Building Coverage**

To demonstrate the proposed Project's compatibility with existing development in the surrounding area, an analysis of lot coverage for the proposed site and for existing development in the area was conducted. The *building footprint* is the amount of structural development (in square feet) at ground level. *Lot coverage* is generally expressed as a percentage and represents the area of land covered by the building footprint (building area divided by total lot area). The building footprint does not include paved areas, such as driveways or parking areas, nor

walkways around the proposed structures, as defined by Section 1110 of the County Zoning Ordinance.

The majority of lands in the Project vicinity support rural-residential land uses, some with small-scale agricultural uses (typically citrus orchards); refer to Figure 5D, Surrounding Land Uses. Other lands are undeveloped and therefore, do not support built elements. On the surrounding parcels where development has occurred, the majority of such lands are large-acre parcels with structures of varied square footage, depending on the use (i.e., single-family residential versus agricultural). As lot sizes generally decrease in the vicinity of the Valley Center "commercial core," building coverage increases.

With Project implementation, the Project design would include construction of three equipment pads. Two of these pads would support the inverters/transformers (approximately 10 feet by 32 feet =  $320 \text{ s.f.} \times 2 = 640 \text{ s.f.}$ ) and one switchgear pad (approximately 8.5 feet by 7.5 feet, or 64 s.f.) for a total of approximately 704 s.f. The Project would also result in installation of the PV solar panels mounted on a collection of SAT systems supported by machine-driven metal "H" beam or round pipe rack pilings (nominal). The estimated footprint of each beam/piling would be approximately 0.02 s.f., with 2,096 beams/pilings being installed. Therefore, the footprint of the beams/pilings would total approximately 46s.f. (0.02 s.f. x 2,096 beams/pilings = 46 s.f.).

Overall, the land area covered by the proposed development would be approximately 750 s.f. (640 s.f. plus 64 s.f. plus 46 s.f.) of the total 66-acre area, overall lot coverage within the MUP area would be less than one percent (0.00002 acres). As such, Project coverage would represent only a fractional portion of the two affected parcels, consistent with the generally rural character of surrounding lands; refer also to Table 6, below. Therefore, lot coverage for the Project would be similar in comparison to (or lesser than) other properties in the surrounding area.

As noted previously, the solar panels would be installed in rows that rotate to face east in the morning and west in the afternoon hours, tracking the sun about a north/south axis to maximize solar absorption. Therefore, as the panels rotate and near a flatter position during the midpoint of the day, the panels would appear to cover a more substantial land surface area at this time when viewed from vantage points at a higher elevation; however, the panels would be mounted on poles and/or in combination with a concrete foundation, thereby minimizing the footprint, or coverage, of each panel row within the array. Taking this into account, the Project coverage represents a very small percentage of the affected parcels, thereby further enhancing Project consistency with lot coverage typical of other developed properties within the area.

Additionally, when standing onsite within the panel field, views at eye level would include the poles and the spacing between the poles (16.9 feet on center on average), visibly reinforcing that only a very limited area of land would be covered by the Project elements. No improvements are proposed on the remaining 40 acres of the property, further contributing to the condition that only a limited portion of the site would be covered by the Project components. For the above reasons, the Project is considered to be consistent with this finding with regard to lot coverage.

TABLE 6
STUDY AREA – LOT COVERAGE ANALYSIS

APN#	Address	Existing Land Use	Lot Size (Acres)	Total Building Size (Sq. Ft.)	Building Footprint (Sq. Ft.) <sup>1</sup>	Lot Coverage (Estimated) <sup>2</sup>
188-120-56 (Adjacent to Project Site)	29743 Cole Grade Road	Single-Family Rural Residential	2.99	1,897	1,897	0.014, or 1.4 Percent
188-120-06 (Adjacent to Project Site)	30267 Miller Road	Single-Family Rural Residential / Limited Agricultural Uses (Citrus Orchard)	14.03	3,590	1,795	0.0029, or 0.29 Percent
188-120-51 (Adjacent to Project Site)	30295 Via Valencia	Single-Family Rural Residential	2.15	2,272	1,136	0.012, or 1.2 Percent
188-120-48 (Adjacent to Project Site)	30294 Via Valencia	Single-Family Rural Residential	2.45	2,284	1,142	0.012, or 1.2 Percent
188-120-49 (Adjacent to Project Site)	30346 Via Valencia	Single-Family Rural Residential	2.33	1,792	1,792	0.018, or 1.8 Percent
188-120-50 (Adjacent to Project Site)	30398 Via Valencia	Single-Family Rural Residential	2.09	2,198	1,099	0.012, or 1.2 Percent
188-120-45 (Adjacent to Project Site)	30414 Via Valencia	Single-Family Rural Residential	6.63	2,013	1,006	0.004, or 0.4 Percent
188-150-10 (Adjacent to Project Site)	29651 Wilhite Lane	Single-Family Rural Residential/Agricultural (Citrus Orchards)	19.11	2,618	1,309	0.0016, or 0.16 Percent
188-151-47 (Adjacent to Project Site)	29603 Wilhite Land	Single-Family Rural Residential/Agricultural (Citrus Orchards)	10.0	2,834	1,417	0.003, or 0.3 Percent

#### **TABLE 6, CONTINUED**

APN#	Address	Existing Land Use	Lot Size (Acres)	Total Building Size (Sq. Ft.)	Building Footprint (Sq. Ft.) <sup>1</sup>	Lot Coverage (Estimated) <sup>2</sup>
188-151-43 (Adjacent to Project Site)	29462 Twain Way	Single-Family Rural Residential/Agricultural (Citrus Orchards)	3.70	1,914	1,914	0.012, or 1.2 Percent
188-151-04 (Adjacent to Project Site)	N/A	Access Drive	10.0	N/A	N/A	
188-151-06 (Adjacent to Project Site)	29345 Highpoint Drive	Single-Family Rural Residential	2.72	1,356	1,356	0.113, or 11.3 Percent
188-120-13 (Adjacent to Project Site)	29345 Cole Grade Road	Commercial Egg Farm Operation/Agricultural (Citrus Orchards)Single- Family Residential	28.39	180,960 <sup>3</sup>	178,280 (2,680 house; 175,600 barns)	0.144, or 14.4 Percent
188-120-32 (Adjacent to Project Site)	Cole Grade Road	Agricultural (Citrus Orchards)	6.91	N/A		
188-120-35 (Adjacent to Project Site)	Cole Grade Road	Undeveloped/Vacant	7.23	N/A		
188-180-04 (Adjacent to Project Site)	29406 Cole Grade Road	Agricultural (Fallowed Citrus Orchards)	10.90	N/A		
188-180-62 (Adjacent to Project Site)	14171 Millco Lane	Single-Family Rural Residential	2.33	2,340	2,340	0.23, or 2.3 Percent
188-171-33 (Adjacent to Project Site)	Cole Grade Road	Single-Family Rural Residential	2.89	N/A		
188-171-30 (Adjacent to Project Site)	29534 Cole Grade Road	Vacant	3.05	N/A		
188-171-27 (Adjacent to Project Site)	29550 Cole Grade Road	Commercial Egg Farm Operation/Single- Family Rural Residential	17.10	167,475 <sup>3</sup>	167,475	0.225, or 22.5 Percent
188-171-24 (Adjacent to	29643 Miller Road	Agricultural (Citrus Orchards)	2.0	2,315	1,157	0.013, or 1.3 Percent

#### **TABLE 6, CONTINUED**

APN # Project Site)	Address	Existing Land Use	Lot Size (Acres)	Total Building Size (Sq. Ft.)	Building Footprint (Sq. Ft.) <sup>1</sup>	Lot Coverage (Estimated) <sup>2</sup>
188-120-09, -10, and -12 (Proposed Project)	Cole Grade Road	Agricultural Use (Fallowed Citrus Orchards); Vacant; Limited Development (Small-Scale Structures Supporting Agricultural Operations)	26.33 and 39.86, (Approximately 66 acres)		704 as Proposed)	0.0002, or 0.02 Percent

<sup>1</sup> Land surface area covered by structures. Assumes one-story building where number of stories is unknown. 2 Lot coverage = Building Footprint/Lot Size.

#### Lighting and Glare Effects

Viewers looking to the site from public or private roads or private residential uses at higher elevations than the Project site would have the potential to experience panoramic views of the valley below. As such, the potential for the proposed Project to result in glare effects that would detract from or contrast with the existing visual quality of the area would occur.

In addition to numerous other technical investigations, in order to evaluate the potential glare/glint effects of solar panels, an investigation was previously conducted by the Federal Aviation Administration (FAA) for the installation of a 4-megawatt PV solar power generation array adjacent to Denver International Airport (DIA) in Colorado in 2006. A number of tests were performed to analyze potential glare effects on the airport (a land use that is highly sensitive to the effects of glint and/or glare) such as placing sample PV solar panels at different installation locations and at variable angles. No glare was noted by observers in any of the panel orientations. An aerial observation was also conducted. Reflectivity of the panels was measured four times per day, concluding that 96 percent of the sun's light was absorbed by the panels, and that the light reflected was dispersed. Since the panels were installed in August 2008, no complaints have been filed with DIA with regard to glare effects from the panels. A similar PV solar panel project was installed on the Express Hub at the Fresno Airport in Fresno, California. The project involved installation of flat plate PV modules and PV modules that capture and concentrate sunlight onto a solar cell which allow only reflected light from heat.

Other similar solar panel projects throughout the U.S. and globally have been installed near airports with no impacts on flight operations with regard to glare. Such locations include the

Munich Airport in Germany; the Love Field Airport in Prescott, Arizona; and, the San Francisco, California Airport. Additional PV solar studies considered in this visual analysis for the proposed Project included the Panoche Valley Solar Farm Project Glint and Glare Study (Panoche Report)<sup>1</sup> and a Technical Memorandum provided by SunPower Corporation, (SunPower Report)<sup>2</sup>, both of which concluded findings of no significant adverse effects with regard to glare generated by PV solar panels.

Based on the above discussion and findings for glare effects of similar solar PV panel installations, potential Project-related glare effects experienced by viewers from area roadways, pedestrian walkways, or other areas frequently used for outdoor activities on surrounding properties are anticipated to be none to minimal, and no significant glare impacts would occur. Based on available technical evidence evaluating the reflectivity of the solar PV solar panels, the proposed Project would not install highly reflective building materials that would result in a substantial increase in light or glare that would affect the surrounding area or that would produce reflective light that would create adverse disability or discomfort glare. The proposed Project would be in conformance with the County's Guidelines of Determining Significance for Lighting and Glare.

As mentioned previously, all inverters/transformers and switchgear would be constructed of non-flammable materials (i.e., steel) painted with a non-reflective earthtone finish to blend the components into the visual landscape. Roofing for these structures would also be metal and painted with a non-reflective, earthtone finish to reflect the visual character of the surrounding natural environment. To ensure that the potential for glare effects to occur as a result of the Project, such design measures would be made a condition of approval with adoption of the MUP Plot Plan.

The potential for glare effects from the Project would be further minimized, as all solar panels would be coated with a non-reflective coating. Uncoated clear glass has a typical reflection rate of approximately eight percent;<sup>3,4</sup> however, the majority of windows today have coatings that increase reflectivity in order to reduce the amount of heat gain within a building or occupied space. For solar PV applications, the more light that is reflected away from the glass surface becomes lost energy for power conversion, and therefore, anti-reflective coatings are utilized

Panoche Valley Solar Farm Project Glint and Glare Report, prepared by Power Engineers, May 10, 2010.

<sup>2</sup> SunPower Corporation Technical Notification #T09014, Solar Module Glare and Reflectance, dated September 29, 2009.

<sup>3</sup> Commercial Windows – Windows for High-Performance Commercial Buildings. URL Online: http://www.commercialwindows.org/reflectance.php. Accessed September 24, 2013.

<sup>4</sup> PGO-Online: Anti-Reflective Coatings ARC Series. URL Online: http://www.pgo-online.com/intl/katalog/antireflection.html. Accessed September 24, 2013.

to ensure that the maximum amount of sunlight penetrates the glass and strikes the solar cells beneath the glass. The typical PV solar modules in use today have an anti-reflective coating with a reflection rate of less than six percent. The anti-reflective coating would be applied by the manufacturer at the manufacturing plant at the time when the panels are constructed. Additionally, the metal piers (or other support structures) used for installation of the solar panels would be galvanized or painted to minimize reflection of light from the surface and to respect the natural setting. This design measure would be made a condition of approval with adoption of the MUP Plot Plan.

Limited Project lighting would be installed to allow for security. At a minimum, permanent lighting would be provided for the outdoor equipment access areas, such as at the inverters and switchgear; under equipment shade structures; and, at the site entrance. Low-level lighting would be installed at the main entry gates to facilitate access.

All lighting would be operated manually or activated via motion sensors and would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. All lighting would conform to County of San Diego outdoor lighting requirements. All outdoor lighting controls would incorporate dusk-to-dawn photocell controllers, occupancy sensors, and/or switches as appropriate. Lighting levels shall be as recommended in Illuminating Engineering Society (IES) standards. Suitable fixtures would be specified and installed according to the hazardous area classification, if applicable.

The appearance of the above-described Project elements within the landscape is not anticipated to significantly detract from or contrast with the existing visual character and/or quality of the surrounding neighborhood, community, or localized area. The location, size, design, and operating characteristics of the proposed use would be compatible with adjacent uses, residents, buildings, and structures with consideration given to harmony in scale, bulk, and coverage. Based on the above analysis, Project impacts with regard to lighting and glare would be less than significant, and no mitigation measures are required.

2) Removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings.

None of the parcels or adjacent offsite lands support designated landmarks, federally-, State-, or locally-designated historic resources, significant trees, or rock outcroppings. Although the Project would result in the installation of the solar panels and associated facilities within the existing landscape, no significant visual resources either onsite or offsite would be removed or substantially altered or otherwise affected as the result of Project construction.

The Project site is designated as a civic use type. The proposed use is allowed under the existing General Plan land use and zoning designations with County approval of a MUP, and is therefore consistent with the land use intended for the property by the County. Although development of the site with the proposed PV solar facilities would change the onsite use from agriculture to a utility use, design measures are proposed (landscape screening, Project elements of minimal height and scale, etc.), to ensure that the Project does not result in a significant effect on the existing visual setting and that the rural character or image of the neighborhood is not adversely altered with Project implementation.

As such, the Project as proposed would not result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area. Impacts would be less than significant, and no mitigation is required.

3) Substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, a trail within an adopted County or State trail system, a scenic vista or highway, or a recreational area.

Project construction activities (i.e., construction vehicles, equipment to be installed, etc.) would be temporarily visible on the Project parcels; however, the identified sites occur within a rural environment with limited visual resources of significant value. Construction activities may be somewhat visible from area roadways and adjoining properties; however, such effects would be temporary and would cease upon completion of construction.

The proposed facilities would be constructed on disturbed/developed lands that currently support agricultural uses. Land uses within the surrounding area generally include rural residential and agricultural-type uses. As stated above, the site is located within the valley and is therefore generally blocked from view from surrounding public roadways and privately-owned properties, due to the relatively level topography. As one moves further from the site on public or private roadways or private residences located at a higher elevation along the surrounding hillsides, views to the site may occur; however, such views would be distanced from the Project site, and the visibility of the proposed facilities would be diminished within the surrounding landscape. Additionally, existing development and established vegetation would further reduce or restrict views to the site. The proposed retention of existing citrus trees and/or additional landscape screening along Cole Grade Road and Via Valencia would further blend the development into the surrounding visual setting and reflect the character of other developed parcels along the valley floor, thereby reducing the visibility of the Project. Therefore, views from private residences or private or public roadways located at a higher elevation than the

Project are not anticipated to be substantially obstructed, interrupted, or detracted from as a result of Project implementation.

Panel strings would be electrically connected to each other via underground wiring. As designed, the Project would underground the utility lines between the solar panels within the interior of the site. These lines would extend to the switchgear pad; refer to Figure 3A, Major Use Permit Plot Plan. From the switchgear pad, the line would be undergrounded to an existing SDG&E utility pole supporting a 12 kV (overhead) distribution line within the Cole Grade Road right-of-way. Where the line meets the existing utility pole, the line would extend upwards to connect to the existing aboveground SGD&E distribution line. No new aboveground utilities are therefore proposed or required with the Project (other than the limited portion required for connection to the existing aboveground distribution line, which would occur in conformance with SDG&E system design requirements. Therefore, the Project would be consistent with the San Diego General Plan requirement for new development to place underground utilities to "maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies."

As identified previously, several County-designated Scenic Highways are located within the vicinity of the Project site which include: State Highway 76 - from the City of Oceanside east to State Highway 79 (Eligible State Scenic Highway/County Scenic Highway); Lilac Road/Valley Center Road (S6) – from State Highway 76 to State Highway 76 (County Scenic Highway); Vista Way, Gopher Canyon, and Old Castle Roads - from Vista city limits north and east to Lilac Road (County Scenic Highway); and, Lake Wohlford Road - from Valley Center Road east (Escondido City limits) to Valley Center Road (excluding portion within City of Escondido); refer to Table 3, County Designated Scenic Roadways, above. These roads are all located over 2.5 miles from the Project site. Depending on the elevation of these roadways relative to the Project site; topography, development, and/or existing vegetation; and, distance to the Project site, the Project would not be visible from varying locations along these roadway segments. As shown in Figure 6, Viewshed/Landscape Unit Map, these roadways would not have views to the site. Therefore, views of the Project from these roadways would not be diminished, and the Project would not substantially obstruct, interrupt, or detract from existing views from a scenic roadway.

Additionally, views may occur from public trails within the Hell Hole Canyon County Preserve located to the east or other such trails that occur along the various mountain ranges that rise from the valley floor; however, such views would be intermittent and would vary due to the viewer's location. As the Preserve is located approximately 4.5 miles from the Project site, the proposed facilities are not anticipated to significantly detract from or interrupt existing views

from any public trails within the Preserve. Any potential views of the Project site from such trails would occur at a distance, thereby reducing the visibility of the proposed facilities. In addition, views to the site from such trails would likely be intermittent due to topography as well as intervening vegetation along the trails. With consideration for distance to the Project site and the limited size (height) of the panels, along with other built elements visible within the landscape, the visual effect of the Project would be minimal, and views would not be significantly changed with Project implementation.

With consideration for the limited size (height) of the panels and other proposed structural elements in combination with other built elements visible within the landscape of the valley floor, the visual effect of the Project would be minimal and views would not be significantly changed with Project implementation. As such, it is not anticipated that the Project would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road or a scenic vista or highway. In addition, views from established public recreational areas or trails would not be substantially obstructed or interrupted with development of the site as proposed. Therefore, impacts would be less than significant, and no mitigation is required.

The Project proposes to dedicate to the County (via an irrevocable offer of dedication, or IOD) an approximately 47-foot wide easement from centerline of Cole Grade Road along the Project frontage to allow for ultimate half-width right-of-way improvement of the roadway. Such improvements would occur in accordance with County Public Roadway Standards for Community Collector roads with improvement options (2.1D) with a bike lane (construction of bike lane not proposed as part of the Project). The width of the easement would also allow for future construction of a public recreational trail, consistent with requirements of the Valley Center Community Trails and Pathways Plan; however, construction of this trail and half-width improvements to Cole Grade Road would be by others and is not required or proposed as part of the Project.

If constructed in the future, views into the site would be experienced by users of the path; however, due to the landscape screening, the limited height of the Project components, and distance to the proposed PV solar panels, views of the Project site for travelers looking to the site from the trail would be reduced, and viewer response to the Project is considered to be low. Therefore, it is not anticipated that the Project would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from an adopted (future) trail within the County's trail system.

As such, it is not anticipated that the Project would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road or a scenic vista or highway. In

addition, views from established recreational areas would not be obstructed or interrupted with development of the site as proposed. Therefore, impacts would be less than significant, and no mitigation is required.

4) The project would not comply with applicable goals, policies or requirements of an applicable County Community Plan, Subregional Plan, or Historic District's zoning.

The Project as proposed has been designed to conform to the requirements of applicable goals, policies and requirements of the County General Plan, Valley Center Community Plan, Valley Center Design Guidelines, and the County Zoning Ordinance; refer to Appendix A, Project Conformance with Applicable Plans, which provides a discussion of Project conformance with these documents, as appropriate. However, the Project would not conform to maximum fence height requirements set forth in the Zoning Ordinance and/or Valley Center Design Guidelines. Security for the Project components would be maintained through installation of an 8-foot high chain-link fence around the perimeter of the Project site. Per Section 6708 of the County Zoning Ordinance, maximum fence height for the Rural Residential zone (which applies to the Project site) is six feet topped with one foot of razor wire. Fencing that exceeds a height of six feet is required to conform to the minimum setback standards established for main structures. Although the Project proposes an increase of two feet in the allowed fence height and would result in non-conformance with applicable rear and exterior side yard setback requirements, such characteristics are not anticipated to substantially or adversely affect the existing community setting or visual character of the area. Additionally, although allowed, the Project design does not propose the use of razor wire on top of the chain link fence, thereby providing a less intrusive or uninviting appearance within the surrounding largely ruralresidential and agricultural setting.

As part of the Project design, and to the extent possible, existing citrus trees would be retained for screening purposes along portions of Cole Grade Road and Via Valencia; refer to Figure 3D, Conceptual Landscape Plan. Additional landscaping would be planted along portions of Cole Grade Road and Via Valencia in front of the proposed chain-link fence to further screen views into the site from adjacent public/private vantage points. As such, views of the chain link fence (and the Project components) from the adjoining public roadways and adjacent private properties in these areas would be greatly reduced and/or obscured and are not anticipated to be adversely affected by Project implementation.

The Project is not within the boundaries of a Historic District or a Subregional Plan, and is therefore, not affected by such a plan. As such, Project impacts with regard to the significance criteria would be less than significant, and no mitigation is required.

# 5.6 Cumulative Impact Analysis

Figure 8, Discretionary Projects Map, identifies the projects considered for the cumulative analysis. The study area selected for the Project generally includes those projects within a two-mile radius of the site. A list of projects considered for the cumulative analysis is included in Table 7, Cumulative Projects, below.

The cumulative study area was determined based upon the surrounding topography and potential views to the site from offsite public locations. The study area limits generally encompass the surrounding ridgelines with consideration for distance from the Project site. Viewers located on any downslopes away from the Project site would not have views of the Project. Additionally, locations within the valley on the lower slopes may have views to the site, but such views would be decreased by distance and intervening topographic conditions, as well as existing development and established vegetation. Locations at or below the elevation of the Project site (e.g. within the flatter lands of the valley floor) would not have views to the Project site. Table 7 provides a list of discretionary projects that were approved within the last five years or that are currently being processed by the County of San Diego Department of Land Use that are considered to have a potential to contribute to cumulative impacts on visual resources within the Valley Center area.

TABLE 7
CUMULATIVE PROJECTS

COMOLATIVE TROSLETS					
Project Number*	Permit Type	Project Reference			
1	MUP, Tentative Map	Butterfield Trails, MUP (Formally ALTI)			
2	Site Plan	Valley Center View Properties Retail			
3	Site Plan	Villalobos Site Plan B Designator			
4	Major Pre-Application	James Lee, Minor Pre-App, 08-151			
5	Major Use Permit	Valley Center North Village Sewer Plant			
6	Major Use Permit	Cricket Communication, Zap Cell Site			
7	Major Grading Permit	L-15560 Mackey (Bernsen) 27251 Valley Center Road			
8	Major Grading Permit				
9	Initial Consultation	Con Dios Solar 33			
10	Tentative Parcel Map	Hatfield Place			
11	Major Use Permit	Valley Center Solar Farm - Vesper Road			
12	Plan Amendment Authorization	Weston-Valley Center PAA 09-003			
13	Major Grading Permit				
14	Tentative Map	Pauma Heights North TM 5060-1			

Project Number*	Permit Type	Project Reference
15	Major Pre-Application	Solar Energy Project
16	Site Plan	Weston Towne Center
17	Major Pre-Application	Lilac Plaza MPA
18	Major Use Permit	NLP Valley Center Solar
19	Major Use Permit	Verizon Aguacate MUP

<sup>\*</sup>Project numbers correspond to locations identified on Figure 8, Discretionary Projects Map.

It is anticipated that future construction activities within the cumulative study area would occur on various sites and at varied times, when an application for development is made. Such construction-related impacts would be short-term and would cease upon completion. In addition, all new discretionary projects within the cumulative study area would be subject to environmental and design review on a site-specific, project-by-project basis to ensure visual aesthetic impacts are limited to the extent possible during the construction process. All future construction activities would also be required to be consistent with the County's regulatory requirements and applicable conditions of approval to reduce potential cumulative effects of construction to less than significant.

In addition, future development of the cumulative projects in the Project vicinity could permanently convert existing offsite open space or undeveloped/vacant lands to a developed condition, potentially resulting in the incremental loss of such lands within the Valley Center community. Such future development could also contribute to the alteration of views to designated visual resources. All future development within the surrounding area would be subject to an evaluation of the significance of potential cumulative visual and aesthetic changes on a site-specific, project-by-project basis, with consideration for project scope and contribution to a change in the overall visual pattern or character within the community.

The cumulative projects considered for the Visual Analysis are located throughout the Valley Center area; refer to Figure 8, Discretionary Permits. The projects considered represent a range of use types including solar energy generation, residential, commercial, infrastructure improvements, cell towers, and commercial uses.

As shown on Figure 8, the locations shaded in green (within the two-mile radius study area) would have views to the Project site. Such views would likely occur due to area topography that allows for unobstructed views and viewing locations at a higher elevation than that of the Project site. As can be seen on Figure 8, none of the cumulative project identified within the two-mile radius study area would have views of the Project components and would therefore

not contribute to an overall cumulative effect that such projects may have on visual resources within the area.

It should be noted that several solar energy-generating facilities within the Valley Center area are being considered or are under construction within the viewshed, although at a distance from the Project site. These projects include the Valley Center solar farm project, located along Valley Center Road, and the Con Dios Solar 33 solar project. The Valley Center Solar Farm project is currently under construction; the Con Dios Solar 33 project applicants have undergone an Initial Consultation with County staff.

As the Valley Center area offers abundant sunshine, combined with available undeveloped lands that are generally flat, the area represents optimal conditions for the sighting of solar energy facilities in the future. If proposed, it is anticipated that any future installation of solar panels along the valley floor would occur sporadically on available parcels as independent development applications, rather than concentrated in one large area of the valley. Thus, the cumulative visual effects of such installations would be reduced, as a range of small-scale to larger-scale projects would likely be proposed, depending on available land, appropriate zoning, and the nature of the development application.

In addition, as evaluated for the proposed Project, potential glare impacts on a cumulative level as the result of additional solar energy facilities locating within the Valley Center community or surrounding area would be less than significant. As all solar panels are designed to absorb sunlight, potential glare effects from future additional solar installations would not create significant glare or reflective surfaces that would create adverse effects on surrounding land uses or on views from surrounding vantage points.

If proposed, future solar installations along the valley floor would have a similar visual effect as other types of development would have in that they would generally change undeveloped land to developed land. Over time, it is anticipated that development within the Valley Center community and surrounding areas will continue to occur. As the valley floor is extensive, and the proposed Project site represents a minimal overall percentage of such lands, the proposed development is not expected to result in a significant visual change in the appearance of the valley floor when viewed from higher elevations. In addition, due to the limited height and scale of the proposed Project elements, the Project is not anticipated to contribute to a significant cumulative impact on existing views from locations within the valley, as such views would be restricted by relatively level topography, and intervening development and vegetation.

Assuming a complete buildout of all the projects considered for the cumulative analysis, potential aesthetic cumulative impacts are considered to be less than significant for the following reasons:

It is not anticipated that the projects considered would not result in the introduction of features that would detract from or contrast with existing visual features found in the surrounding area. Existing development in the Valley Center area largely consists of a range of uses that include limited single-family residential and commercial uses, mobile home parks, agricultural uses, and public recreational areas. The inclusion of the proposed Project in the land use mix would not conflict with the visual quality of the area because the Project is generally distanced from the other projects considered and would be installed on lands generally surrounded by vacant or undeveloped lands; refer to Figure 6, Viewshed/Landscape Units Map. Additionally, the proposed Project would not disrupt the pattern of development adjacent to existing homes or businesses or substantially conflict with any adopted design guidelines or thematic development requirements in the area.

The addition of the cumulative projects would not remove or create a substantial adverse change to the features that represent a valued visual resource in the area. The valley floor would still be visible from higher elevations and would still appear to have a scattered development pattern once the cumulative projects are constructed. None of the projects would significantly alter the mountain views from the valley floor from places where they are currently observed. It is not anticipated that any of the cumulative projects would remove or replace any local or State designated landmarks.

The proposed Project would not substantially obstruct or detract from valued lookouts or panoramic views from public roads, scenic highways, or recreational areas. Buildout of the cumulative projects would not have an adverse effect on these public viewsheds because the projects are anticipated to match the existing development pattern present in the valley. From a vantage point where all of the developments would be visible, it would appear as the continuation of the existing development pattern in the area. In order to see all of the proposed projects, the viewpoint would need to be located at a higher elevation than the valley floor, and would be distanced from the proposed Project site. As such, the cumulative visual effect of the projects considered would not substantially obstruct views from scenic vistas or public roads.

Moreover, the cumulative projects would be required to comply with applicable goals and policies of the County General Plan, Valley Center Community Plan, Valley Center Design Guidelines, and County Zoning Ordinance. If deviations to changes to the existing or allowed

conditions or uses are proposed with future projects, project-specific analysis would be required to justify such changes, prior to approval by the County.

In addition, all lighting proposed with future development within the cumulative study area, such as street lighting, security lighting, or exterior illumination, would potentially result in increased light and glare impacts within the Valley Center community. Projects within the cumulative study area would be evaluated by the County on a project-by-project basis to determine the extent of such lighting necessary and any appropriate site-specific measures to reduce potential impacts on surrounding areas (i.e., shielding, use of low-level lighting, directing lighting away from adjacent properties and open space areas). As such, it is anticipated that the cumulative effects of increased lighting and/or glare associated with future development in the cumulative study area would be reduced to less than significant levels. As the Project would require minimal lighting for the purposes of security and maintenance, the Project would not contribute to significant cumulative impacts relative to light and/or glare. Impacts in this regard would be less than significant.

All future development within the Valley Center community would be subject to an evaluation of the significance of potential cumulative visual and aesthetic changes on a site-specific, project-by-project basis, with consideration for its scope and contribution to a change in the overall visual pattern or character within the community. Adherence to applicable General Plan policies and goals and applicable Valley Center Design Guidelines, as applicable, would further reduce potential cumulative impacts relative to the long-term alteration of views to designated scenic resources. Although the Project would result in a permanent visual change in the existing landscape with development of the proposed PV solar farm, as demonstrated by evaluation of the visual simulations prepared, the Project is not considered to contribute to a significant cumulative effect with regard to the loss of views to scenic resources.

### 5.7 Summary of Project Impacts and Significance and Conclusions

The Visual Analysis was prepared to provide an evaluation of potential Project impacts on existing visual resources and character of the surrounding community of Valley Center, California. With regard to visual resources, the Project would not result in the introduction of features that would significantly detract from or contrast with the visual character of the surrounding community by conflicting with visual elements or quality of an existing area (i.e., through conflicting style, size, coverage, scale, building materials, etc.). The Project would not result in the removal of or substantial adverse change to one or more features that contribute to

the valued visual character or image of the Project area, including but not limited to designated landmarks, historic resources, trees, or rock outcroppings. Furthermore, the Project would not substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, trails within an adopted County or State trail system, scenic vista or highway, or recreational area. The Project as designed would also not result in an inconsistency with any goals, standards, or policies related to visual resources as given in the County General Plan or Valley Center Community Plan; although the Project would be inconsistent with the Valley Center Design Guidelines and County Zoning Ordinance with regard to maximum fence height requirements, design measures such as retaining several rows of existing citrus trees and planting additional landscaping for screening purposes are proposed to minimize views of the Project components from adjacent public roadways and private properties.

For the above reasons, it was determined that the Project would not result in potentially significant impacts on visual resources in the Valley Center community. As such, no mitigation measures are required or proposed.

#### 6.0 Visual Mitigation Measures / Design Considerations

#### 6.1 Visual Impact Analysis

The Project would not result in the introduction of features that would significantly detract from or contrast with the visual character of the Valley Center community by conflicting with visual elements or quality of an existing area. In addition, the Project would not result in the removal of or substantial adverse change of one or more features that contribute to the valued visual character or image of the Project area, including but not limited to designated landmarks, historic resources, trees, or rock outcroppings. Furthermore, the Project would not substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, trails within an adopted County or State trail system, scenic vista or highway, or recreational area.

The Project as designed would also not result in an inconsistency with any goals, standards, or policies related to visual resources as given in the County General Plan or Valley Center Community Plan. Although the Project would not be in compliance with maximum fence height and exterior side yard and rear yard setback requirements given in the Zoning Ordinance and Valley Center Design Guidelines, design measures are proposed in the form of landscape screening and retaining some of the existing citrus trees and other vegetation to screen the Project from view and to reinforce the existing rural setting and community. Additionally, panel strings would be electrically connected to each other via underground wiring. As designed, the Project would underground the utility lines between the solar panels within the interior of the site. These lines would extend to the switchgear pad. From the switchgear pad, the line would be undergrounded to an existing SDG&E utility pole supporting a 12 kV (overhead) distribution line within the Cole Grade Road right-of-way. Where the line meets the existing utility pole, the line would extend upwards to connect to the existing aboveground SGD&E distribution line. No new aboveground utilities are therefore proposed or required with the Project (other than the limited portion required for connection to the existing aboveground distribution line, which would occur in conformance with SDG&E system design requirements. Therefore, the Project would be consistent with the San Diego General Plan requirement for new development to place underground utilities to "maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies."

The Project would implement a number of design measures that would reduce visibility of the Project components within the visual landscape while enhancing the existing setting. The proposed Project design includes landscape screening along Cole Grade Road and a Valencia, along portions of the property boundary where adjacent to residential or other potentially sensitive uses. Access to the parcels would be provided through a secured gate and identified by minimal signage, rather than decorative or otherwise highly visible design features. inverters/transformers and switchgear would be constructed of non-flammable materials (i.e., steel) painted with a non-reflective earthtone finish to blend the components into the visual landscape. Roofing for these structures would also be metal and painted with a non-reflective, earthtone finish to reflect the visual character of the surrounding natural environment. To ensure that the potential for glare effects to occur as a result of the Project, such design measures would be made a condition of approval with adoption of the MUP Plot Plan. Additionally, the metal piers (or other support structures) used for installation of the solar panels would be galvanized or painted to minimize reflection of light from the surface and to respect the natural setting. This design measure would also be made a condition of approval with adoption of the MUP Plot Plan.

Although the Project would change the visual character of the affected parcels, the proposed facilities would be consistent with development intended for the properties as indicated by the existing General Plan land use designations, and would be visually compatible with other existing uses in the surrounding area which support structural elements or design characteristics (i.e. materials, colors, scale, mass, height, etc.) greater than or similar to that associated with the Project.

Through this Visual Resources/Aesthetics Analysis, potential effects of the PV Solar Farm Project were evaluated against the thresholds of significance developed by the County of San Diego. The Project is considered to be compatible with the existing character of the surrounding Valley Center community and would be consistent with applicable County and community land use and design regulations with regard to visual and aesthetic resources.

No significant impacts were identified with regard to visual/aesthetic resources. As such, Project impacts would be less than significant, and no mitigation measures are required or proposed.

#### 7.0 References

- County of San Diego General Plan. Adopted August 3, 2011.
- County of San Diego General Plan Valley Center Community Plan. Adopted August 3, 2011.
- County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements Visual Resources. July 30, 2007.
- County of San Diego Valley Center Design Guidelines. Approved May 7, 1986. Revisions adopted November 1990.
- County of San Diego Wildland Urban Interface Ordinance. Ordinance No. 9670.
- County of San Diego Zoning Ordinance. Updated with Ordinance Update No. 80, October 2009.
- Panoche Valley Solar Farm Project Glint and Glare Report, prepared by Power Engineers, May 10, 2010.
- SunPower Corporation Technical Notification #T09014, Solar Module Glare and Reflectance, dated September 29, 2009.

#### 8.0 Report Preparers

#### Michael Baker International

Nicole Marotz, AICP, LEED AP
Environmental Planner
County Certified CEQA Consultant for Visual Impact Analyses
Primary Author of the Visual Impact Analysis

#### THIS PAGE INTENTIONALLY LEFT BLANK







Figure 1

NLP Valley Center Solar **LOCAL VICINITY MAP** 

Figure 2A

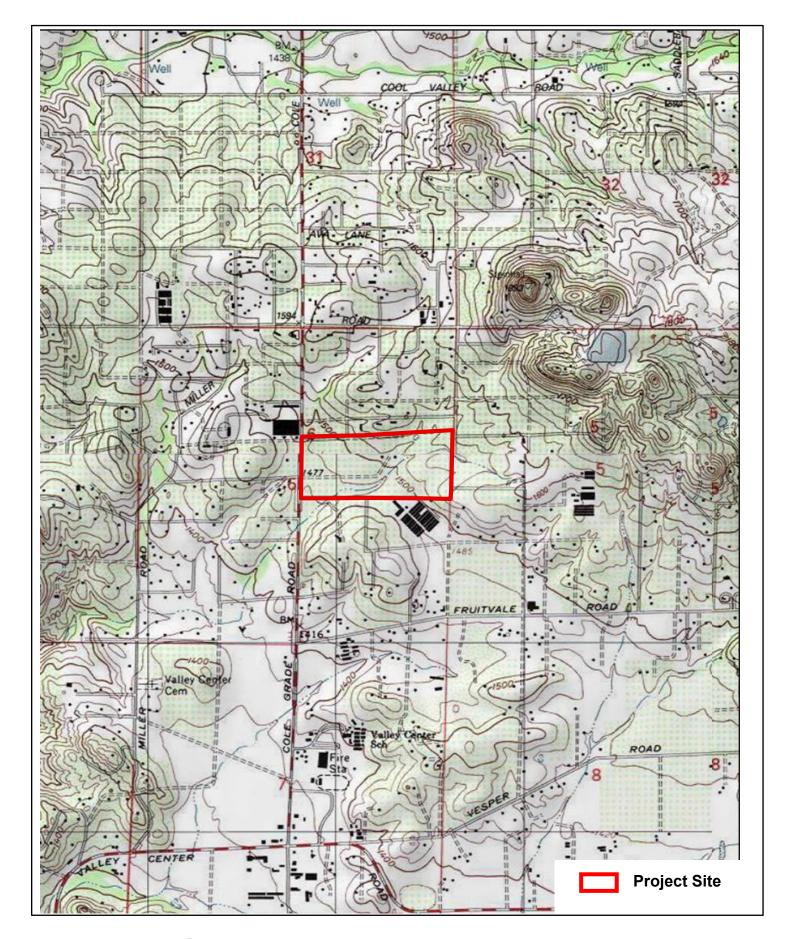
**Project Site** 



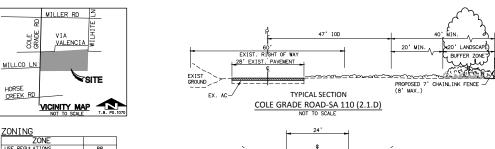




INTERNATIONAL





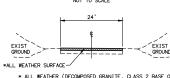


LOT COVERAGE SETBACK

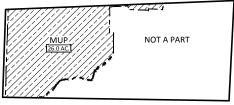
' PP

WETLANDS

AC TAPER -



\* ALL WEATHER (DECOMPOSED GRANITE, CLASS 2 BASE OR GRAVEL) MIN. 75,000 lbs. FIRE APPARATUS BEARING LOAD TYPICAL SECTION FIRE ACCESS ROAD

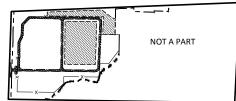


FENCE W/ SLATS

OWNER: 12 BROWN FAMILY TRUST

OWNER: 12 BROWN FAMILY TRUST APN: 188-120-35





AGRICULTURAL MITIGATION

FENCE W/

#### NOTES

- 1. GROSS AREA: 66.7 ACRES
- 2. NET AREA: 65.6 ACRES (COLE GRADE ROAD EASEMENT & 47' ULTIMATE R/W =1.1 AC)
- 3. MUP BOUNDARY AREA: 25.8 AC
- 4. GENERAL PLAN: SEMI-RURAL RESIDENTIAL (SR-2)
- 5. REGIONAL CATEGORY: SEMI-RURAL LANDS
- 6. TOPOGRAPHIC SOURCE: AEROTECH MAPPING INC, FLOWN 6/18/2013
- 7. ASSOCIATED REQUESTS: NONE
- 8. WATER DISTRICT: VALLEY CENTER MUNICIPAL WATER DISTRICT
- 9. FIRE DISTRICT: VALLEY CENTER FIRE PROTECTION DISTRICT
- 10. EXISTING STRUCTURES ARE TO REMAIN UNLESS NOTED.
- 11. EXISTING SDG&E EASEMENTS (A7) AND POWER POLES ARE TO BE RELOCATED, TO NOT CONFLICT WITH PROPOSED PROJECT.
- 12. THE APPROVAL OF THIS MAJOR USE PERMIT (MUP) AUTHORIZES THE FOLLOWING: CONSTRUCTION, OPERATION, AND MAINTENANCE OF A PHOTOVOLTAL SOLLAR FAMI PURSUANT TO SECTION 6952 OF THE SAN DIEGO COUNTY ZONING ORDINANCE.
- 13. THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OF APPROVIAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVIAL TO PERFORM ANY GRADINS SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY.
- 14. ALL SOLAR EQUIPMENT STRUCTURES TO BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIALS (CONCRETE, BLOCK, METAL) OR SIMILAR.
- 15. LIGHTING FOR MAINTENANCE AND SECURITY PROPOSES ONLY. SHIELDED LIGHTING LOCATED AT ENTRANCE CATES AND INVERTER/TRANSFORMER PADS & SHALL CONFORM TO COUNTY OF SAN DIEGO OUTDOOR LIGHTING REQUIREMENTS. SEE DETAIL ON SHEET 2.
- 16. PHASING PROJECT MAY BE IMPLEMENTED IN SEVERAL PHASES WITHOUT REGARD TO SEQUENCE.
- ALL DISTURBED AREAS WOULD BE COVERED WITH GRAVEL OR A BINDING AGENT TO REDUCE DUST.
- 18. SEE PRELIMINARY GRADING PLAN FOR PROPOSED GRADING

OWNER: CANDICE BUTLER APN: 188-120-50/ Room

1

OWNER: DEAN & ANNA FOSTER

NO DEVELOPMENT WILL OCCUR IN THE AREAS IDENTIFIED ON THE PLOT PLAN AS "AGRICULTURAL EASEMENT".

WILLIAM & NORMA SHOEMAKER APN: 188-120-45

NOT A PART

EXISTING ORCHARD

- 20. SITE ACCESS GATE(S) TO BE EQUIPPED WITH FIRE DEPARTMENT APPROVED STROBE LIGHT ACTIVATION AND KNOX KEY-OPERATED SWITCH.
- 21. SOLAR RELATED FACILITIES (PANELS, RACKING, ELECTRICAL CONNECTIONS, INVERTEX/TRANSFORMER PADS, SWITCHEAR, MET STATION, FENCING, AND INTERNAL ACCESS, ETC. 3 SHOWN ON THE PLOT PLAN MAY BE RELOCATED (PECONFIGURED, AND/OR RESIZED WITHIN THE SOLAR FACILITY DEVELOPMENT AREA WITH THE ADMINISTRATIVE APPROVAL OF THE DIRECTOR OF POS WHEN FOUND IN CONFORMANCE WITH THE INTERN AND CONDITIONS OF PERMIT'S APPROVAL. INVERTEE/TRANSFORMER LOCATIONS CAN BE RELOCATED/RECONFIGURED WITHOUT REQUIREMENT OF MINOR DEVIATION. THE NIMETRE/TRANSFORMER MAST COMPLY WITH THE NO BEDINANCE AND MUST BE ELEVATED 11 ABOVE FLOOD ELEVATION. THE 24' FIRE ACCESS ROAD WIDTHS MAY BE REDUCED DAMINISTRATELY WITH THE APPROVAL OF THE COUNTY AND FIRE AUTHORITY HAVING JURISDICTION OVER THE PROJECT.
- 22. THE 5.6 ACRES OF ON-SITE AGRICULTURAL MITIGATION LAND WILL BE PRESERVED FOR AGRICULTURAL AND RELATED USES ONLY FOR THE LIFE OF THE PERMIT/OR APPLICANT WILL ENTER THE PACE PROGRAM AND MITIGATE AGRICULTURAL IMPACTS BY PURCHASE OF AGRICULTURAL CREDITS.
- 23. A SYSTEM IDENTIFICATION SIGN SHALL BE LOCATED AT THE GATE ENTRANCE SIGN SHALL BE 12%18. SIGN SHALL LIST NAME OF SITE AND CONTACT INFORMATION AS PROVIDED BY SOGE.
- 24. PRIVATE PROPERTY/NO TRESPASSING AND HIGH VOLTAGE SIGNS SHALL BE LOCATED AT THE GATE ENTRANCE AND EVERY 100' MINIMUM ON FENCE, THE SIGN SHALL BE 10014'-NISCELLANEOUS INTERIOR DIRECTIONAL AND SAFETY SIGNAGE ARE PERMITTED.
- 25. OUTDOOR LIGHTING CIRCUITS SHALL INCORPORATE DUSK-TO-DAWN PHOTOCELL CONTROLLERS, OCCUPANCY SENSORS, AND/OR SWITCHES AS APPROPRIATE.
- A METEOROLOGICAL (MET) STATION SHALL BE LOCATED ADJACENT TO THE INVERTER/EQUIPMENT PAD.
- 27. EXISTING WELL WITHIN MAJOR USE AREA SHALL BE DESTROYED IN ACCORDANCE WITH THE COUNTY REGULATORY CODE SECTION 67.431.

0' S/B

#### ASSESSOR PARCEL NUMBER

#### LEGAL DESCRIPTION

ALL THOSE PORTIONS OF THE EAST HALF OF SECTION 6, TOWNSHIP 11 SOUTH, RANGE 1 WEST, SAN BERNARDIND BASE AND MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, AS DESORIBED IN DEEDS RECORDED APRIL 1, 1985 AS INSTRUMENT NO. 85-124118, AND SECONDED AND AS INSTRUMENT NO. 95-521370, JUNUARY 4, 1997 INSTRUMENT NO. 91-000-3566, ALL OF OFFICIAL PLATE OF STRUMENT NO. 91-000-3566, ALL OF OFFICIAL PLATE OFFICIAL PLATE OF STRUMENT NO. 91-000-3566, ALL OF OFFICIAL PLATE O

#### BASIS OF BEARINGS

THE BASIS OF BEARINSS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83, EPOCH 2011.00), ZONE 6, BASED LOCALLY UPON CONTROL STATIONS P478 & FMOR, PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78\*55\*32"W.

#### **BENCHMARK**

BM S0300; 3.5" DISC USGS S300, 30' +/- SOUTH OF INTERSECTION OF SUNSET ROAD AND VALLEY CENTER ROAD.

SITE ADDRESS: 29471 COLE GRADE ROAD VALLEY CENTER, CA 92082

#### EXISTING EASEMENTS\*

	DESCRIPTION	DISPOSITION
(A2)	PUBLIC ROAD	TO REMAIN
(A3)	PUBLIC ROAD	TO REMAIN
(A4)	SDG&E PUBLIC UTILITIES	TO REMAIN
(A5)	SDG&E PUBLIC UTILITIES	TO REMAIN
(A6)	WATER PIPE	TO REMAIN
(A7)	SDG&E PUBLIC UTILITIES	TO BE RELOCATED
(48)	SDG&E PUBLIC UTILITIES	TO REMAIN
65	SDG&E PUBLIC UTILITIES	TO REMAIN

\*INDICATES EXCEPTION NUMBER IN LAWYERS TITLE
COMPANY PRELIMINARY REPORT ORDER NUMBERS 7607703 &
613672391, DATED OCTOBER 22, 2012 AND JUNE 25,
2013, RESPECTIVELY, WHICH WAS USED IN THE
PREPARATION OF THIS SURVEY. ITEMS LISTED AS "A#" ARE TIED TO 7607703. ITEMS LISTED AS "B#" ARE TIED TO 613672391.

#### PROPOSED EASEMENT

	DESCRIPTION
1	AGRICULTURAL EASEMENT

#### LEGEND: PROPERTY BOUNDARY EXISTING EASEMENT

IOD RIGHT-OF-WAY MUP BOUNDARY (26.0 AC) PROPOSED 7' CHAINLINK FENCE W/ SLATS (8' MAX.)

GATE

• ф

PROPOSED ACCESS GATE EXISTING PAVEMENT

PROPOSED PAVEMENT PROPOSED FIRE ACCESS ROAD-ALL WEATHER (WIDTH PER PLAN) EXISTING OVERHEAD POWERLINE

PROPOSED UNDERGROUND INTERCONNECTION PROPOSED PV PANEL PROPOSED INVERTER/TRANFORMER PAD (2)

RELINQUISHMENT OF ACCESS RIGHTS

AGRICULTURAL MITIGATION (5.84 AC) FIRE DEPARTMENT TURN AROUND (SEE SHEET 2) ALL WEATHER

VIDEO CAMERA ON 10' POLE (6) PRIVATE DRIVEWAY ACCESS-ALL WEATHER

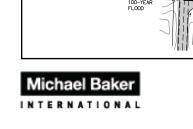
2-202-4-203 100-YEAR INUNDATION LIMITS

#### SHEET INDEX

SHEET 1 - TITLE SHEET/PLOT PLAN SHEET 2 - ELEVATIONS/DETAILS SHEET 3 - LANDSCAPE PLAN

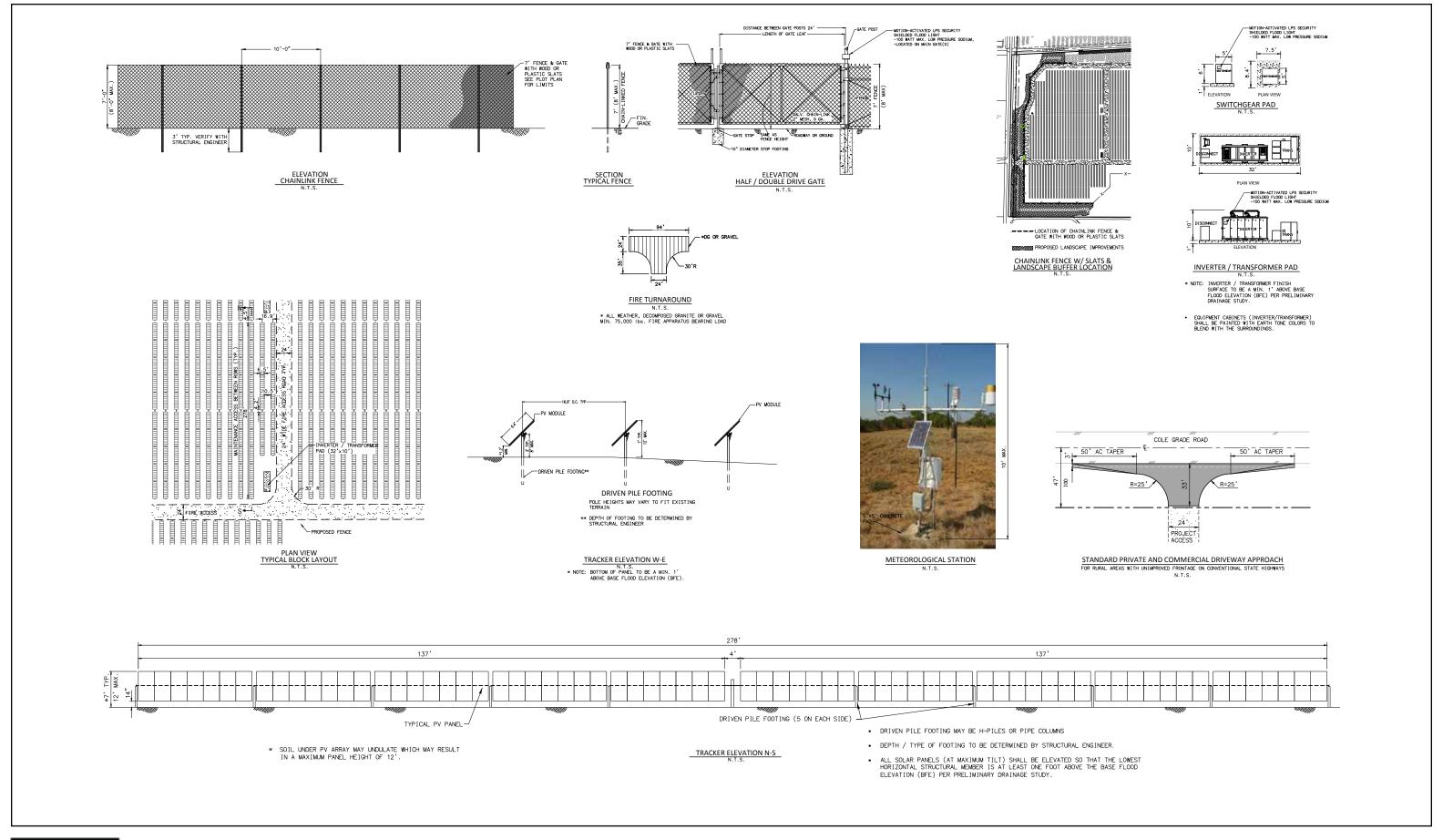
#### OWNER/APPLICANT:

NLP VALLEY CENTER SOLAR, LLC 17901 VON KARMAN AVENUE, SUITE 1050 IRVINE, CA 92614 CONTACT: PATRICK BROWN PHONE: (619) 733-2649



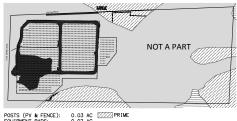
NLP Valley Center Solar

145596Figures.indd



Michael Baker

- 1. GROSS AREA: 66.7 ACRES
- 2. NET AREA: 65.6 ACRES (COLE GRADE ROAD EASEMENT & 47' ULTIMATE R/W =1.1 AC)
- 3. MUP BOUNDARY AREA: 25.3 ACRES
- 4. TOPOGRAPHIC SOURCE: AEROTECH MAPPING INC, 6/18/2013
- 5. THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS FLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HERGON, AND AGREES TO OBTAIN VALID GRADING PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY.
- 6. ALL DISTURBED AREAS WILL BE SURFACED WITH GRAVEL OR A BINDING AGENT TO REDUCE DUST
- 7. PILE DRIVING OPRATIONS: IN ORDER TO LIMIT TEMPORARY CONSTRUCTION NOISE, ALL PILE DRIVING OPERATIONS SHALL BE LOCATED A MINIMUM SETBACK OF 215 FEET FROM ANY OCCUPIED RESIDENTIAL PROPERTY LINE. IF FILE DRIVING OPERATIONS ARE TO OCCUR WITHIN 215 FEET, THEN THESE OPERATIONS SHALL LIMITED TO OPERATE 25% OF THE HOURLY OR DAILY DURATION.



V100=8.4 ft/sect Q100=145 cfs

188-171-30

188-171-33

2.2.3 188-180-62

188-180-04

188-120-35

FARMLAND OF STATEWIDE SIGNIFICANCE SOILS AGRICULTURAL LANDS IMPACTS

TOPOGRAPHY AND GRADING

MAXIMUM SITE RETAINING WALL HEIGHT: N/A TOTAL DISTURBED AREA BEFORE PROJECT: 2.2 AC TOTAL DISTURBED AREA AFTER PROJECT: 19.6 AC

IMPERVIOUS SURFACES TABLE

ITEM DESCRIPTION ITOTAL ARFA!

188-120-48 188-120-49

188-120-32

#### EXISTING EASEMENTS\*

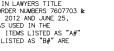
0	DESCRIPTION	DISPOSITION
(42)	PUBLIC ROAD	TO REMAIN
(A3)	PUBLIC ROAD	TO REMAIN
(A4)	SDG&E PUBLIC UTILITIES	TO REMAIN
<b>(45)</b>	SDG&E PUBLIC UTILITIES	TO REMAIN
(A6)	WATER PIPE	TO REMAIN
(A7)	SDG&E PUBLIC UTILITIES	TO BE RELOCATED
<b>(48)</b>	SDG&E PUBLIC UTILITIES	TO REMAIN
€\$	SDG&E PUBLIC UTILITIES	TO REMAIN

\*INDICATES EXCEPTION NUMBER IN LAWYERS TITLE COMPANY PRELIMINARY REPORT ORDER NUMBERS 7607703 & 613672391, DATED OCTOBER 22, 2012 AND JUNE 25, 2013, RESPECTIVELY, WHICH WAS USED IN THE PREPARATION OF THIS SURVEY. ITEMS LISTED AS "A#" ARE TIED TO 7607703. ITEMS LISTED AS "B#" ARE TIED TO 613672391.

#### PROPOSED EASEMENT

	DESCRIPTION
1	AGRICULTURAL EASEMENT

188-120-50

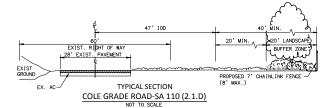


188-120-45

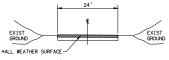
NOT A PART

EX CATCH BASIN/NO GRATE

188-120-13







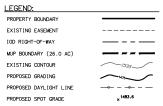
\* ALL WEATHER (DECOMPOSED GRANITE, CLASS 2 BASE OR GRAVEL) MIN. 75,000 lbs. FIRE APPARATUS BEARING LOAD TYPICAL SECTION FIRE ACCESS ROAD

188-150-10

188-151-47

188-151-43

188-151-04





VANAGO V

11111116



100-YEAR INUNDATION LIMITS EXISTING CULVERT RELINQUISHMENT OF ACCESS RIGHTS EXISTING TREES 0

PRIVATE DRIVEWAY ACCESS-ALL WEATHER RETERETERS BMP (SEE MINOR SWMP) 2.2.1

#### ASSESSOR PARCEL NUMBER 188-120-09 & 10

#### LEGAL DESCRIPTION

#### BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COMMINATE SYSTEM OF 1983 (CCS8), EPOCH 2011.00), ZONE 6, BASED LOCALLY UPON CONTROL STATIONS PAR'S PHOME, PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'55'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'S THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) WITH A BEARING OF N78'S THE CALIFORNIA SPATIAL REFERENCE (CSRC) WITH A BEARING OF N78'S THE CALIFORNIA SPATIAL REFERENCE (CSRC) WITH A BEARING OF N78'S THE CALIFORNIA SPATIAL REFERENCE (CSRC) WITH A BEARING OF N78'S THE CALIFORNIA SPATIAL REFERENCE (CSRC) WITH A BEARING OF N78'S THE CALIFORNIA SPATIAL REFERENCE (CSRC) WITH A BEARING OF N78'S THE CALIFORN

#### **BENCHMARK**

BM S0300; 3.5" DISC USGS S300, 30' +/- SOUTH OF INTERSECTION OF SUNSET ROAD AND VALLEY CENTER ROAD. ELEVATION = 1500.99

#### SITE ADDRESS:

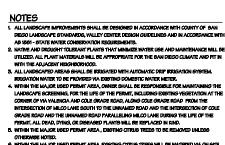
#### OWNER/APPLICANT:

NLP VALLEY CENTER SOLAR, LLC 17901 VON KARMAN AVENUE, SUITE 1050 IRVINE, CA 92614 CONTACT: PATRICK BROWN PHONE: (619) 733-2649



NLP Valley Center Solar

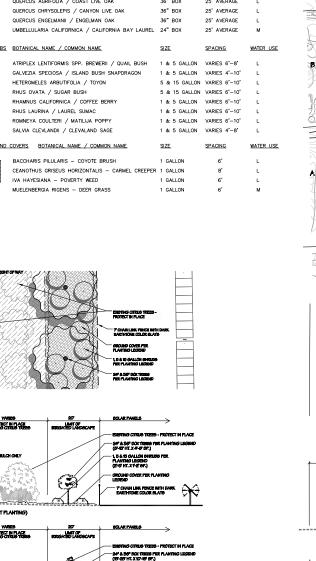
145596Figures.indd

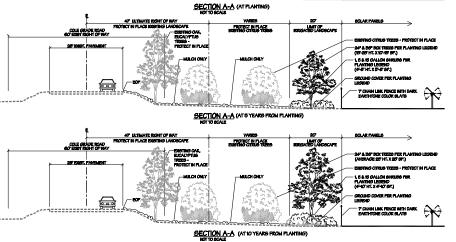


## LANDSCAPE ZONES

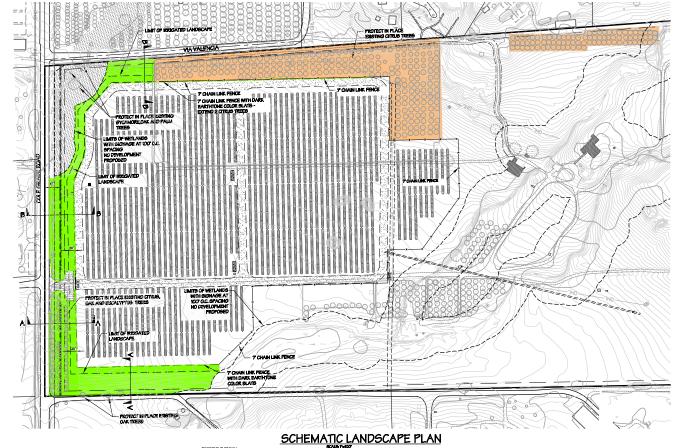
#### PLANT LEGEND

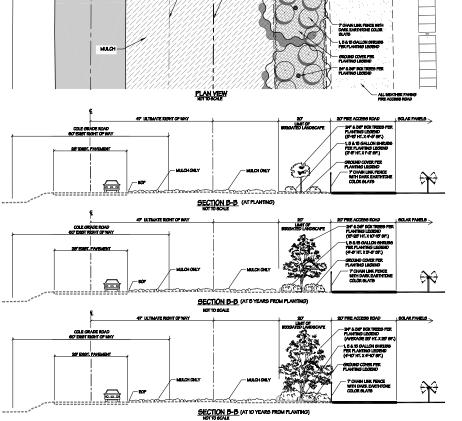
	TREES	BOTANICAL NAME / COMMON NAME	SIZE	SPACING	WATER USE
$\sim$	$\sim$	CERCIDIUM FLORIDIUM / BLUE PALO VERDE	24" BOX	25' AVERAGE	L
5	7	CUPRESSUS FORBESSII / TECATE CYPRESS	24" BOX	25' AVERAGE	L
	)	OLEA EUROPAEA / OLIVE	24" BOX	25' AVERAGE	L
	ز	PLATANUS RACEMOSA / CALIFORNIA SYCAMORE	24" BOX	25' AVERAGE	М
5		QUERCUS AGRIFOLIA / COAST LIVE OAK	36" BOX	25' AVERAGE	L
		QUERCUS CHRYSOLEPIS / CANYON LIVE OAK	36" BOX	25' AVERAGE	L
		QUERCUS ENGELMANII / ENGELMAN OAK	36" BOX	25' AVERAGE	L
		UMBELLULARIA CALIFORNICA / CALIFORNIA BAY LAUREL	24" BOX	25' AVERAGE	м
	SHRUBS	BOTANICAL NAME / COMMON NAME	SIZE	SPACING.	WATER USE
		ATRIPLEX LENTIFORMIS SPP. BREWERII / QUAIL BUSH	1 & 5 GALLON	VARIES 6'-8'	L
		GALVEZIA SPECIOSA / ISLAND BUSH SNAPDRAGON	1 & 5 GALLON	VARIES 4'-10'	L
( ·	. )	HETEROMELES ARBUTIFOLIA / TOYON	5 & 15 GALLON	VARIES 6'-10'	L
		RHUS OVATA / SUGAR BUSH	5 & 15 GALLON	VARIES 6'-10'	L
		RHAMNUS CALIFORNICA / COFFEE BERRY	1 & 5 GALLON	VARIES 6'-10'	L
		RHUS LAURINA / LAUREL SUMAC	1 & 5 GALLON	VARIES 6'-10'	L
		ROMNEYA COULTERI / MATILIJA POPPY	1 & 5 GALLON	VARIES 6'-10'	L
		SALVIA CLEVLANDII / CLEVALAND SAGE	1 & 5 GALLON	VARIES 4'-8'	L
	GROUND	COVERS BOTANICAL NAME / COMMON NAME	SIZE	SPACING	WATER USE
88	>>>>	BACCHARIS PILULARIS - COYOTE BRUSH	1 GALLON	6'	L
		CEANOTHUS GRISEUS HORIZONTALIS - CARMEL CREEPER	1 GALLON	8'	L
		IVA HAYESIANA - POVERTY WEED	1 GALLON	6'	L
		MUELENBERGIA RIGENS - DEER GRASS	1 GALLON	6'	М





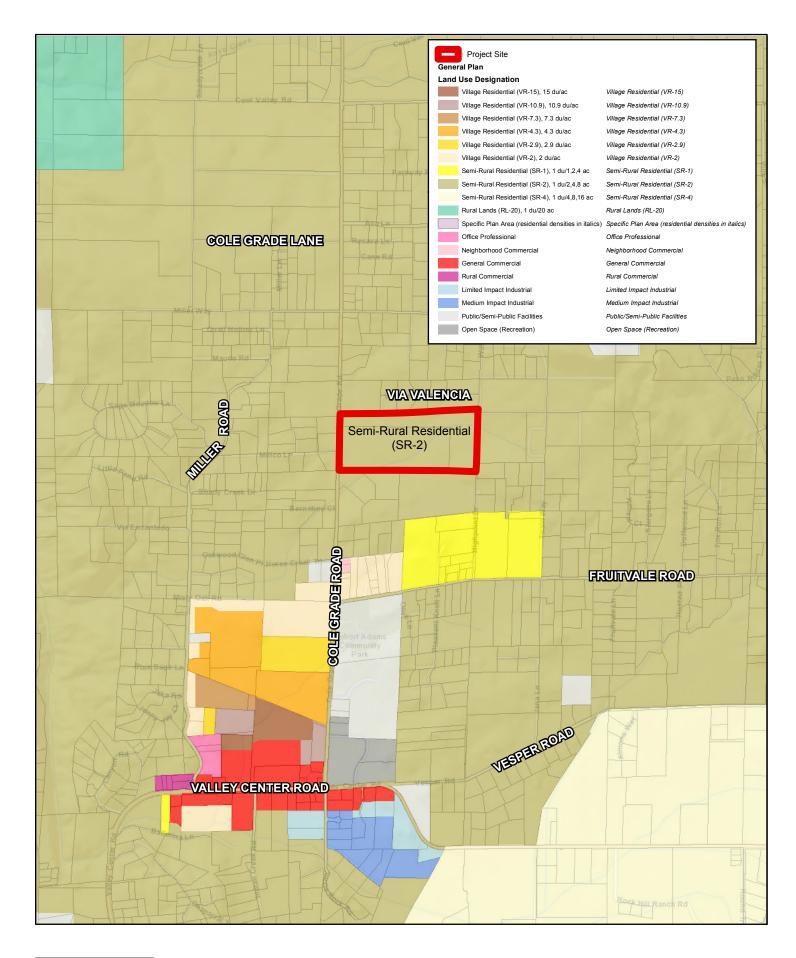
PLAN VIEW



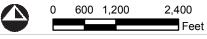


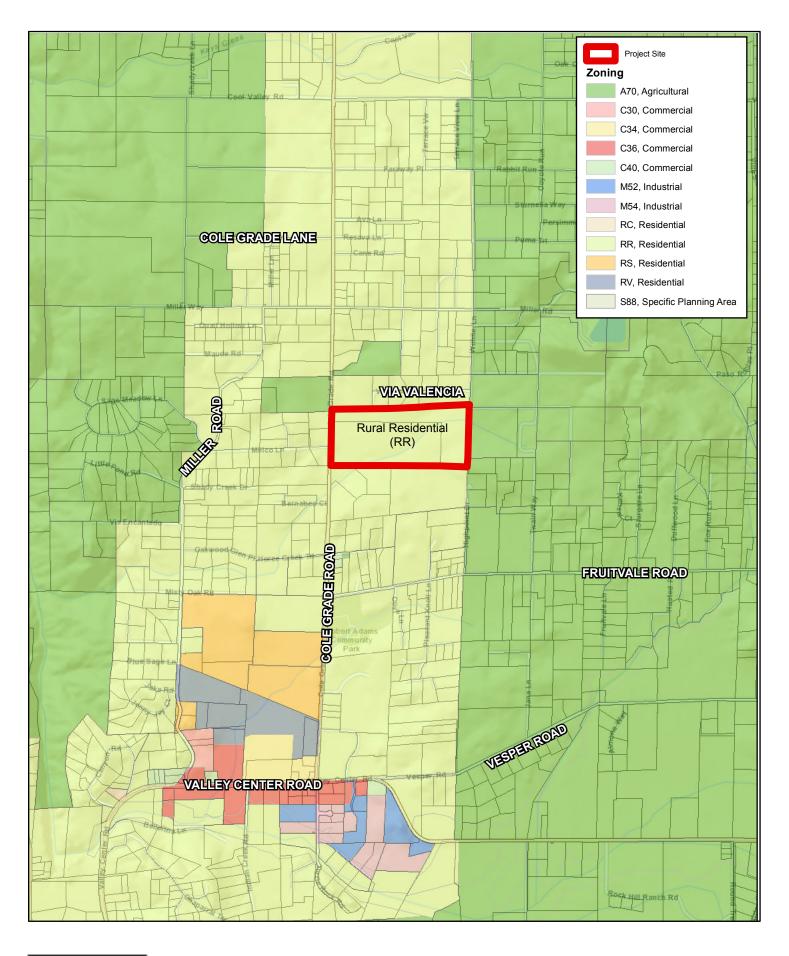




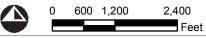












## **AERIAL/PHOTO LOCATION MAP** Figure 5A

NTERNATIONAL











Photo 1: View looking north/northeast to the Project site from Cole Grade Road near southwest corner of Project site.



Photo 2: View looking southeast to the Project site from Cole Grade Road/Via Valencia.

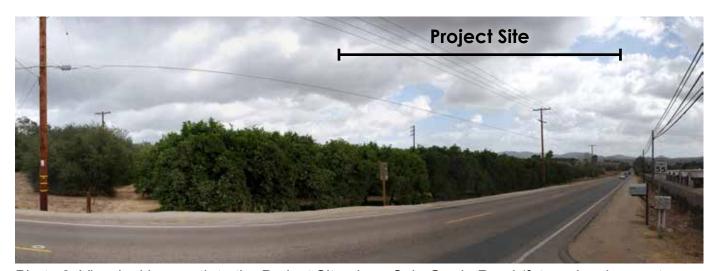


Photo 3: View looking south to the Project Site along Cole Grade Road (future development area obscured from view).



145596Figures.indd

Figure 5B



Photo 4: View looking west/southwest site from northeast corner of subject property (future development area obscured from view).



Photo 5: Onsite view looking northwest/northeast across subject property from existing onsite dirt roadway.



Photo 6: Onsite view looking west/southwest across Project site from existing onsite dirt roadway.



# SURROUNDING LAND USES

Figure





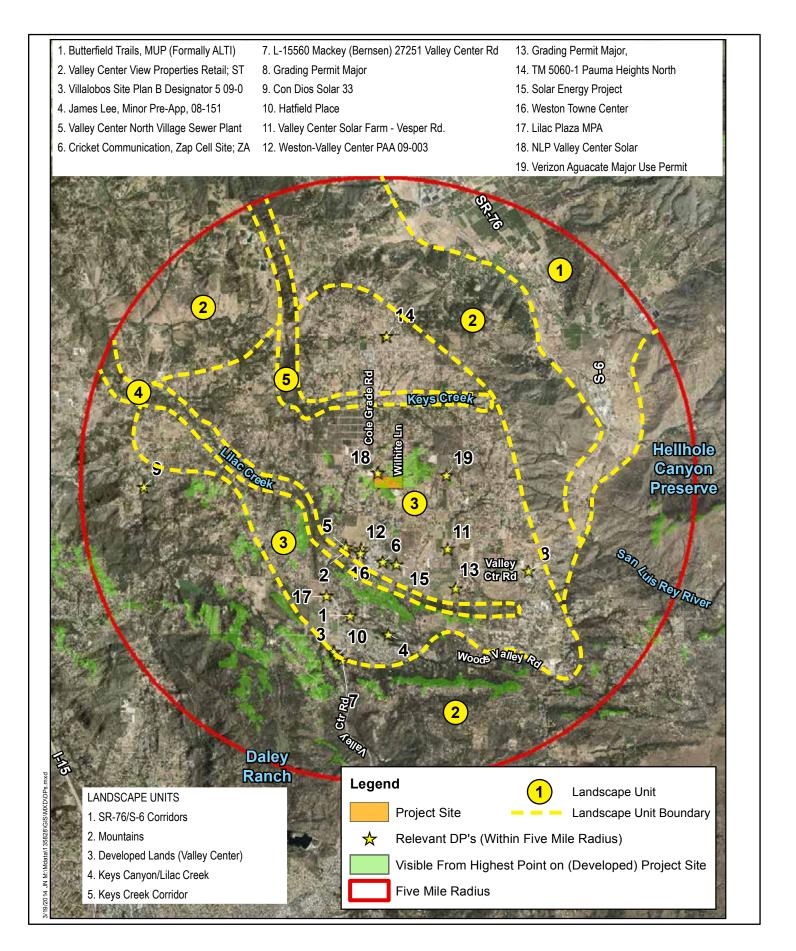




**Project Site** 



INTERNATIONAL

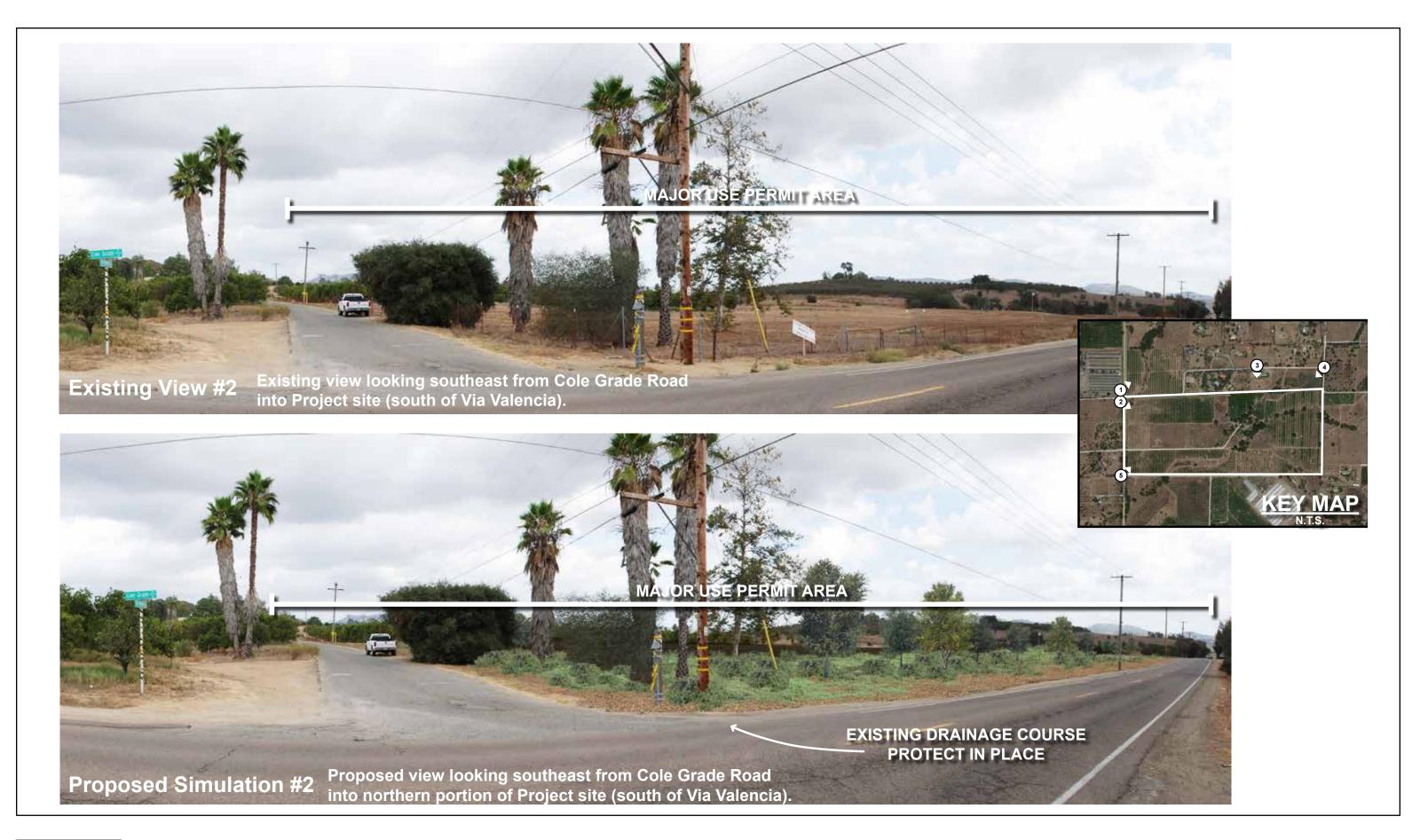






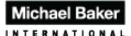


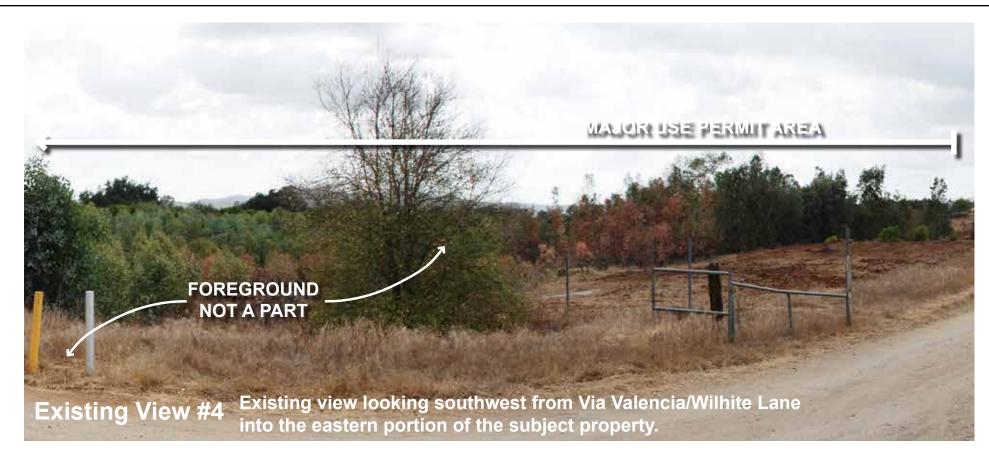


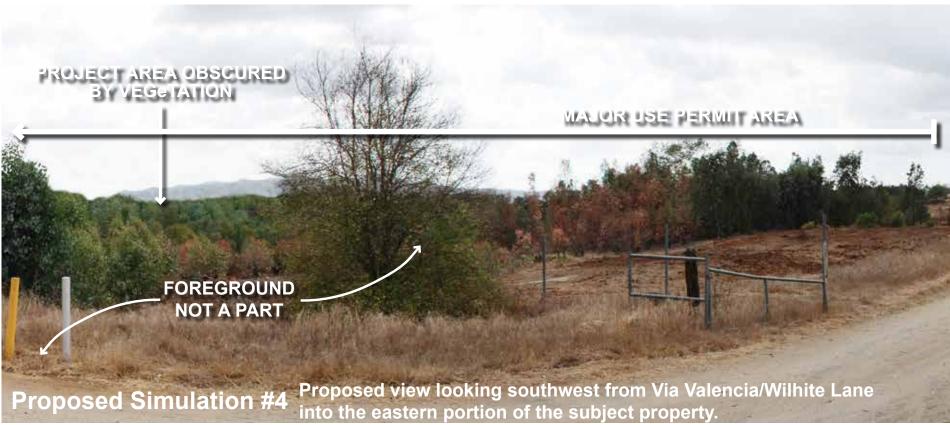




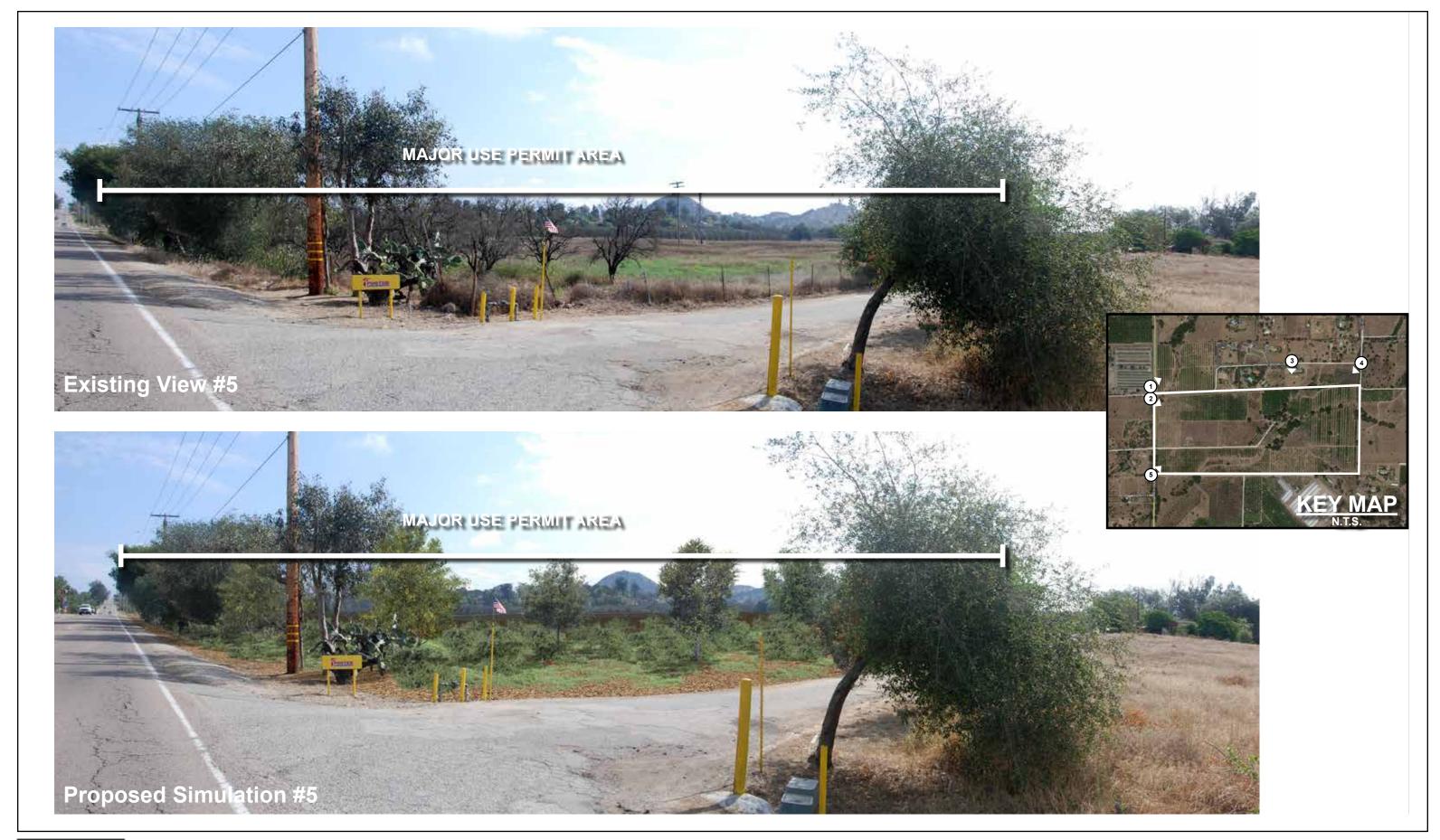


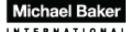


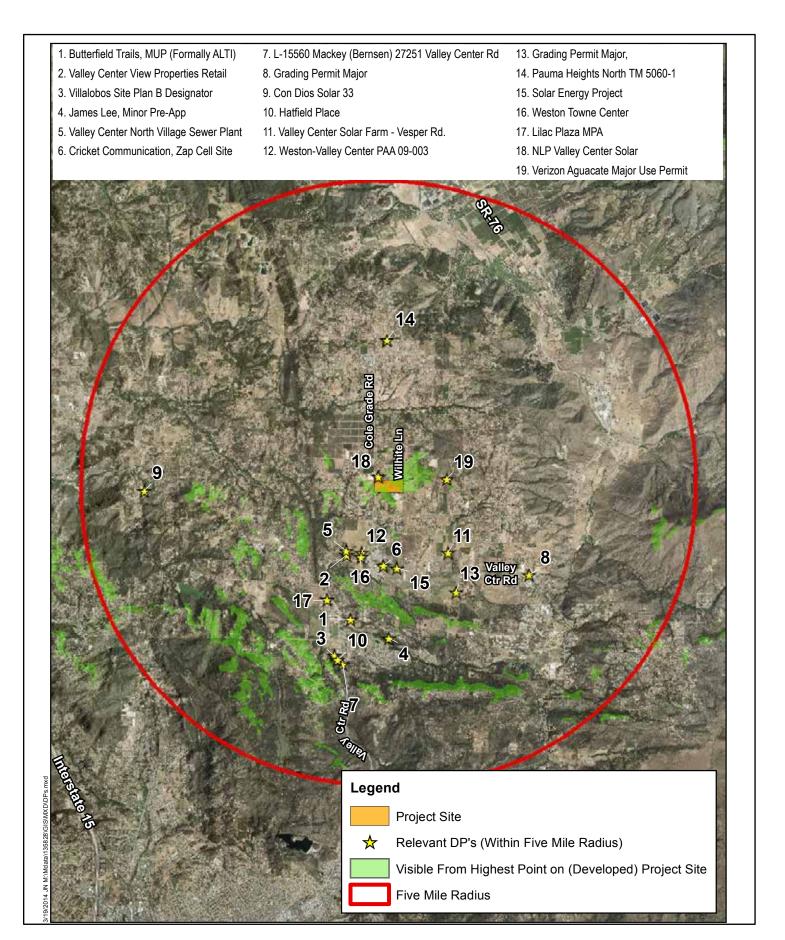














## APPENDIX A Project Conformance with Applicable Plans

## NLP Valley Center, LLC Photovoltaic Solar Farm Project Conformance with Applicable Plans

#### County of San Diego General Plan

The County of San Diego General Plan (adopted August 3, 2011) is intended to provide guidance for the long-term development of San Diego County. The General Plan includes various Elements that provide guidance for accommodating future growth while retaining or enhancing the County's rural character, its economy, its environmental resources, and its unique communities. Goals, policies and objectives are provided within each of the Elements to guide future land development and ensure consistency with the County's intended vision for the future of San Diego County. The Guiding Principles of the General Plan are to:

- 🔊 Support a reasonable share of projected regional population growth;
- Promote health and sustainability by locating new growth near existing and planned infrastructure, services, and jobs in a compact pattern of development;
- Reinforce the vitality, local economy, and individual character of existing communities when planning new housing, employment, and recreational opportunities;
- Promote environmental stewardship that protects the range of natural resources and habitats that uniquely define the County's character and ecological importance;
- Ensure that development accounts for physical constraints and the natural hazards of the land:
- Provide and support a multi-modal transportation network that enhances connectivity and supports community development patterns and, when appropriate, plan for development which supports public transportation;
- Maintain environmentally sustainable communities and reduce greenhouse gas emissions that contribute to climate change;
- Preserve agriculture as an integral component of the region's economy, character, and open space network;
- Minimize public costs of infrastructure and services and correlate their timing with new development; and,
- Recognize community and stakeholder interests while striving for consensus.

#### **Chapter 3 - Land Use Element**

#### **Planning for Sustainability**

#### **Policies**

EU-6.9 Development Conformance with Topography. Require development to conform to the natural topography to limit grading; incorporate and not significantly alter the dominant physical characteristics of a site; and, to utilize natural drainage and topography in conveying storm water to the maximum extent practicable.

Although the majority of land surface in the MUP area is flat, portions would be graded to allow for installation of the panels and associated facilities. Therefore, the topography of the site would largely remain in its natural state.

A significant increase in storm water runoff or treatment needs from the areas affected by the Project is not anticipated to occur. Storm water runoff in areas where facilities would be installed would remain generally unchanged following construction. In addition, the solar panels and supporting structures would occupy a minimal building footprint on the affected properties and would not require or result in a significant change in existing conditions with regard to storm water runoff or treatment needs. As applicable, storm water runoff and treatment would be adequately handled through the implementation of onsite best management practices (BMPs) and/or other design measures and would not result in or require significant changes to existing offsite storm drain facilities.

#### Semi-Rural/Rural Lands

#### **Policies**

Environmental Resource Relationship. Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character and avoid sensitive or intact environmental resources and hazard areas.

The Project site has a County Regional Category designation of Semi-Rural Residential. The Project has been designed to avoid or minimize potential impacts to natural resources and largely conserve the natural onsite topography through the avoidance of grading. Project components have been designed to minimize potential effects on the existing visual landscape with regard to height and scale, as well as overall visibility, as the Project proposes vegetative screening to reduce views into the site and reflect the rural character of the area. No hazardous areas have been identified on the site that would interfere with the proposed development.

#### **GOAL LU-12**

#### Infrastructure and Services Supporting Development.

#### **Policies**

EU-12.4 Planning for Compatibility. Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas. Require context sensitive Mobility Element road design that is compatible with community character and minimizes visual and environmental impacts; for Mobility Element roads identified in Table M-4, an LOS D or better may not be achieved.

The proposed PV solar facility would be allowed under the existing General Plan and zoning designations with County approval of a MUP and is therefore consistent with the County's intended use for the property. The Project has been designed to minimize environmental impacts through site design measures, and all impacts identified can be reduced to less than significant through the implementation of mitigation measures (e.g. biological and agricultural resources). Additionally, the Project is not located within a preserve area. The Project has also been designed to minimize potential visual effects with regard to height and scale, and vegetative screening is proposed along portions of the perimeter fencing where appropriate to reduce public views into the site from Cole Grade Road and Via Valencia.

#### Chapter 5 – Conservation and Open Space Element

#### **Visual Resources**

Goal COS-11

Preservation of Scenic Resources. Preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized.

No designated County Scenic Highways are located adjacent to the Project site, and the site does not support any designated scenic vistas. No other natural or unique features of scenic value are found onsite, as the affected lands have been in use as agricultural lands (now fallowed citrus orchards).

A landscaped buffer consisting of a combination of existing vegetation (citrus trees, oaks, palms) and/or proposed landscape screening would be provided along portions of Cole Grade Road and Via Valencia to screen views into the site and to maintain and enhance the rural

character of the site within the visual landscape. The perimeter chain link fence would also be fitted with wooden or plastic slats to further reduce views into the development area. The visibility of the Project components would also be reduced through Project design to minimize the height and scale of the Project components. Such design measures are intended to minimize potential adverse effects on existing views within the valley setting.

#### **Policies**

- corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.
- ED COS-11.2 Scenic Resource Connections. Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.

No regionally significant vistas, prominent ridgelines, dominant landforms, or reservoirs are present on the Project site. No regionally significant natural features, designated historic landmarks, or points of regional historic or cultural interest occur onsite or in the immediate Project vicinity. The Project site is not within the vicinity of any County-designated Scenic Highways, as identified in the Conservation and Open Space Element of the General Plan. The Project has been designed to minimize visual impacts on area public roadways by distancing the development from adjacent roads and providing landscape screening to reduce views into the site, consistent with the Valley Center Design Guidelines and applicable County roadway design measures.

The Project is not adjacent to any designated open space areas. The Project proposes to dedicate to the County (via an irrevocable offer of dedication, or IOD) an approximately 47-foot wide easement from centerline of Cole Grade Road along the Project frontage to allow for ultimate half-width right-of-way improvement of the roadway within the ROW. Such improvements would occur in accordance with County Public Roadway Standards for Community Collector roads with improvement options (2.1D) with a bike lane (construction of bike lane not proposed as part of the Project). The width of the easement would also allow for future construction of a public recreational trail, consistent with requirements of the Valley Center Community Trails and Pathways Plan; however, construction of this trail and half-width improvements to Cole Grade Road would be by others and is not required or proposed as part of the Project.

- & COS-11.3 Development Siting and Design. Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:
  - o Creative site planning;

- Integration of natural features into the project;
- Appropriate scale, materials, and design to complement the surrounding natural landscape;
- Minimal disturbance of topography;
- Clustering of development so as to preserve a balance of open space vistas, natural features, and community character; and,
- o Creation of contiguous open space networks.

Implementation of the proposed Project would require limited grading, thereby minimizing potential impacts to the natural onsite topography and largely maintaining the natural character of the physical underlying ground surface.

As stated previously, the Project components as proposed are of relatively limited height and scale in order to minimize the visibility of such elements within the visual landscape. Retaining portions of the existing onsite orchard along portions of Cole Grade Road and Via Valencia and installation of the proposed landscape screening along portions of the Project perimeter along these roadways would further blend the Project components into the landscape and reflect the rural character of the surrounding natural landscape.

The Project is not adjacent to any designated open space areas. The Project proposes to dedicate an approximately 47-foot wide easement via IOD along the Project frontage to allow for ultimate half-width improvement of Cole Grade Road within the ROW. The width of the easement would also allow for future construction of a public recreational trail, consistent with requirements of the Valley Center Community Trails and Pathways Plan; however, construction of this trail and half-width improvements to Cole Grade Road would be by others and is not required or proposed as part of the Project. The trail may ultimately connect to the County's regional trail system or other public open space recreational areas; however, no trail improvements are required or proposed as part of the Project.

COS-11.5 Collaboration with Private and Public Agencies. Coordinate with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.

The Project site is not within the vicinity of any County-designated Scenic Highways, as identified in the Conservation and Open Space Element of the General Plan. The Project has been designed to minimize the potential visual effects of the Project components with regard to height and scale, and would be consistent with applicable requirements of the Valley Center Design Guidelines. Vegetated screening is proposed along portions of the perimeter of the development in order to screen public views into the site from Cole Grade Road and Via Valencia and to blend the development into the surrounding landscape.

**COS-11.7 Underground Utilities.** Require new development to place utilities underground and encourage "undergrounding" in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.

Within the Project boundaries, panel arrays would be electrically connected into panel strings using wiring attached to the racking. Panel strings would be electrically connected to each other via underground wiring. Gathering lines would connect individual panel array strings to one or more inverters/transformers and combiner boxes. Wiring from the panel strings would be connected to combiner boxes. Electrical current would then be transferred to the inverters which would convert the Direct Current (DC) produced by the PV solar panels into Alternating Current (AC). These lines would extend to the switchgear pad; refer to Figure 3A, Major Use Permit Plot Plan. From the switchgear pad, the line would be undergrounded to an existing SDG&E utility pole supporting a 12 kV (overhead) distribution line within the Cole Grade Road right-of-way. Where the line meets the existing utility pole, the line would be extended aboveground to connect to the existing San Diego Gas & Electric (SGD&E) distribution line. As such, utility poles and overhead lines are located offsite and are already present within the visual landscape. The Project would not require replacement of or upgrades to any existing offsite utilities, and therefore, the Project would not result in a change to the existing visual appearance of the utility infrastructure in the area. The undergrounding of any Projectassociated electrical lines within the Project boundaries would be consistent with the San Diego General Plan requirement for new development to place underground utilities to "maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies."

#### **GOAL COS-13**

#### **Dark Skies**

© Preserved dark skies that contribute to rural character and are necessary for the local observatories.

#### **Policies**

- ED COS-13.1 Restrict Light and Glare. Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.
- © COS-13.2 Palomar and Mount Laguna. Minimize, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.

cOS-13.3 Collaboration to Retain Night Skies. Coordinate with adjacent Federal and State agencies, local jurisdictions, and tribal governments to retain the quality of night skies by minimizing light pollution.

It is anticipated that the PV solar panels would be black in color and highly absorptive. The materials used to construct the panels are designed to minimize the potential for reflection and retain as much of the solar spectrum as possible, thereby reducing glare. Additionally, based on technical evidence evaluating the reflectivity of the PV solar panels, the proposed Project would not install highly reflective building materials that would result in a substantial increase in light or glare that would affect the surrounding area or that would produce reflective light that would create adverse disability or discomfort glare.

All inverters/transformers and switchgear would be constructed of non-flammable materials (i.e., steel) painted with a non-reflective earthtone finish to blend the components into the visual landscape. Roofing for these structures would also be metal and painted with a non-reflective, earthtone finish to reflect the visual character of the surrounding natural environment. To ensure that the potential for glare effects to occur as a result of the Project, such design measures would be made a condition of approval with adoption of the MUP Plot Plan. Additionally, the metal piers (or other support structures) used for installation of the solar panels would be galvanized or painted to minimize reflection of light from the surface and to respect the natural setting. This design measure would be made a condition of approval with adoption of the MUP Plot Plan.

Limited Project lighting would be installed to allow for security. Low-level lighting would be installed at the main entry gates to facilitate access. Lighting would also be located at each inverter station and at the switchgear. All lighting would be operated manually or activated via motion sensors and would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. All lighting would conform to County of San Diego outdoor lighting requirements.

#### Air Quality, Climate Change, and Energy

#### GOAL COS-14 – Sustainable Land Development

#### **Policies**

**COS-14.4 Sustainable Technology and Projects.** Require technologies and projects that contribute to the conservation of resources in a sustainable manner, that are compatible with community character, and that increase the self-sufficiency of individual communities, residents, and businesses.

The Project is intended to allow for the installation and operation of a PV electrical generation facility and represents an opportunity to provide residents of Valley Center and the greater

surrounding area with clean source of electrical power from renewable sources. As future population growth continues within San Diego County, the demand for electrical service will continue to increase accordingly. The Project represents an additional clean source of electrical power that would supplement energy currently supplied by the existing power grid, thereby reducing the potential for power shortages to occur and decreasing demands on the capabilities of the existing distribution system.

The Project has been designed to respect the existing rural character of the Valley Center community with regard to scale, bulk, height, materials and color, and light and glare effects. Furthermore, design measures are proposed to require installation of landscape screening to minimize potential effects on the existing visual setting and adjacent lands.

# Valley Center Community Plan

#### 1. COMMUNITY CHARACTER

## **GOALS**

1. Preserve and enhance the rural character of Valley Center by maintaining a pattern of land use consistent with the following regional categories.

#### **B. SEMI-RURAL LANDS**

89 Preserve and maintain the overall rural and agricultural character of the semi-rural areas.

The Project site has a County Regional Category designation of Semi-Rural Residential, and the proposed use is allowed under the existing General Plan and zoning designations with County approval of a MUP. The proposed use is therefore consistent with the land use intended by the County for the property. Additionally, the Project has been designed to be compatible with the rural character of the Valley Center community with regard to scale, height, materials, and visual character. Vegetative screening is also proposed along the perimeter of the proposed development area in locations where views from public roads (Cole Grade Road or Via Valencia) or adjacent private land ownerships may occur. Further, several rows of the existing citrus trees would be retained along the Project boundary on portions of Cole Grade Road and Via Valencia to maintain the existing visual character of the site as a citrus orchard, while providing additional screening of the Project components. Only limited grading of the site is required, allowing onsite topography to largely remain in its present state.

## 2. LAND USE

## **GENERAL GOALS**

- » A pattern of development that conserves Valley Center's natural beauty and resources, and retains Valley Center's rural character.
- Development that maintains Valley Center's rural character through appropriate location and suitable site design.

Refer to the response under COMMUNITY CHARACTER, B. SEMI-RURAL LANDS, above.

## **COMMERCIAL GOAL**

#### POLICIES AND RECOMMENDATIONS

80 6. Commercial/civic uses shall not interfere either functionally or visually with adjacent land uses or the rural atmosphere of the community. [PP]

The proposed Project is considered a civic use. The applicable General Plan land use designation for the site is SR-2 (Semi-Rural Residential) with a zone designation of RR (Rural Residential). Due to the operational nature of the proposed PV solar facilities, and that the proposed use is allowed under the existing General Plan land use and zoning designations with approval of a MUP, the Project is not anticipated to interfere functionally with adjacent land uses. Additionally, the Project has been designed to minimize potential effects on visual resources of the surrounding Valley Center community (e.g. proposed landscape screening, distancing the development area from adjacent public roadways, and minimizing the height and scale of the Project components within the landscape) and all such effects have been determined to be less than significant.

№ 7. Commercial/civic uses shall be periodically reviewed to ensure that the standards for noise, light, traffic, odors and all other conditions of approval are continuing to be met.

See response to Policy 6, above. Noise levels may be temporarily increased during the construction phase; however, such effects would cease once installation of the Project components was completed; refer also to the Noise Assessment (Ldn Consulting, Inc., August 2015) prepared for the Project (available under separate cover). No significant noise impacts were identified during the construction or operational stages, and no mitigation measures are required.

Project lighting would be minimal and would conform to applicable County outdoor lighting standards and Valley Center Design Guidelines to avoid potential impacts on dark skies. Traffic generated by the Project would be limited to (short-term) construction traffic required for installation of the Project components and vehicle uses required for (long-term) operational

and maintenance activities and would therefore not result in significant impacts on local roadways or existing circulation patterns.

Limited odors may be generated during the construction phase due to the use of equipment and vehicles (e.g. diesel fumes); however, it is anticipated that such odors would largely dissipate onsite and would cease upon completion of the construction phase. Due to the operational characteristics of the Project, the Project components would not generate odors that would affect adjacent properties.

8. Discourage commercial and civic uses outside of the Villages and limit all such uses to those that are clearly demonstrated as needed and which are compatible with the rural lifestyle of the Valley Center Community Plan.

As stated above, the Project is a civic use. The Project would result in construction of a PV solar facility for the generation of clean energy. The use is allowed under the existing General Plan land use and zoning designations with approval of an MUP, and is therefore consistent with uses intended by the County. Additionally, the Project has been designed to be compatible with the rural character of the Valley Center community with regard to scale, height, materials, and visual character. Vegetative screening is also proposed along portions of the perimeter of the Project development area where views from public roads (Cole Grade Road and Via Valencia) or adjacent private land ownerships may occur. Further, several rows of the existing citrus trees would be retained along the Project boundary on portions of Cole Grade Road and Via Valencia to maintain the existing visual character of the site as a citrus orchard, while providing additional screening of the Project components.

#### 4. MOBILITY

#### **GOAL**

& A circulation system that achieves the combined objectives of connectivity and safety for all users (automobiles, bicyclists, equestrians and pedestrians), and also preserves the rural character of the community.

#### POLICIES AND RECOMMENDATIONS

№ 6. Existing trees and vegetation located within the "Right-of-Way" of all public roads, and determined to be of significant visual benefit shall be transplanted or replaced consistent with the Valley Center Design Guidelines.

Existing citrus trees adjacent to Cole Grade Road and Via Valencia would be retained with the Project; refer to Figure 3D, Conceptual Landscape Plan. The Project as designed would maintain several rows of existing citrus trees along these roadways in order to screen the proposed development area from view from the roadways, with additional landscape plantings

proposed adjacent to the Project perimeter fencing to further enhance the screening effects of the citrus trees.

## 6. CONSERVATION

#### **GENERAL GOALS**

Provide for a "dark sky" which would retain the rural setting and not detract from astronomical research at Palomar Mountain.

Limited Project lighting would be installed to allow for security. Low-level lighting would be installed at the main entry gates to facilitate access. Lighting would also be located at each inverter station and at the switchgear. All lighting would be operated manually or activated via motion sensors and would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. All lighting would conform to County of San Diego outdoor lighting requirements.

#### POLICIES AND RECOMMENDATIONS

17. During the discretionary permit process, encourage the dedication of trails to form a local trail network with a central unifying hub near Cole Grade and Valley Center Roads.

The Project proposes to dedicate an approximately 47-foot wide easement (via IOD) along the Project frontage to allow for ultimate half-width improvement of Cole Grade Road within the ROW. The width of the easement would also allow for future construction of a public recreational trail, consistent with requirements of the Valley Center Community Trails and Pathways Plan; however, construction of this trail and half-width improvements to Cole Grade Road would be by others and is not required or proposed as part of the Project The trail may ultimately connect to the County's regional trail system or other public open space recreational areas; however, no physical trail improvements are required or proposed as part of the Project.

18. Use low sodium lights and light shielding for new subdivisions and use permits as required by the "Dark Sky" Ordinance for those properties within a specified radius of the observatory at Palomar Mountain.

Refer to response to 6. CONSERVATION, General Goals, above.

# San Diego County Zoning Ordinance

Portions of the County Zoning Ordinance that may affect the assessment of visual impacts are generally zoning overlay designators. Relevant designators include:

⊗ B – Community Design Review Area

⊗ D – Design Review Area

- **∞** G Sensitive Resource
- ₩ H Historic/Archaeological Landmark or District
- ⊗ J Special Historic District
- ⊗ S Scenic Area

None of the above designators apply to the Project site, with exception of the G designator relative to structure height and the B designator for Design Review relative to setbacks.

# **Valley Center Design Guidelines**

## PART I. COMMUNITY DESIGN OBJECTIVES

# Design Objectives

- A. Roadway Design Important Thoroughfares
- 2. Design of the Road Edge
  - Note that the community of the Road Edge."

    A twenty-foot deep landscaped edge zone is to be provided along the entire length of Valley Center, Cole Grade, Woods Valley and Lilac Roads. The edge zone will reinforce Valley Center's character as a rural residential community by emphasizing planting of native vegetation, low walls of local stone, wood rail and agricultural fences to give the road edge visual definition and continuity. The edge zone is a requirement for new development in the community. Criteria for its design are given in Design Guideline, "Design of the Road Edge."

The Project design provides for a landscaped edge zone along the Project frontage on Cole Grade Road; refer to Figure 3D, Conceptual Landscape Plan. The existing orange trees and eucalyptus trees along Cole Grade Road would be preserved to the greatest extent possible in order to provide a visual barrier to the Project; refer to Figure 3D, Conceptual Landscape Plan. Additionally, a portion of the existing citrus orchard in the northern portion of the property adjacent to Via Valencia would also be retained for screening purposes. The planting of such landscaping shall be made a Condition of Approval of the MUP to ensure that views of the Project components are minimized from such offsite vantage points.

The Project would install (up to) an 8-foot tall chain-link fence for security purposes along the perimeter of the proposed development area, thereby contributing to the screening of views into the site from offsite public vantage points. Wooden slats or plastic strips would be inserted along portions of the northern, western, and southern portions of the fence to further screen the development from view. Although the Valley Center Design Guidelines discourage the use of chain-link fencing, the Project design includes landscaping (existing and proposed) along the perimeter of the fence to screen both views of the fence and of the Project components.

## 3. Underground Utilities

En The undergrounding of overhead utilities on Valley Center Road should be implemented as soon as possible. The community is committed to reducing the present harmful visual impact of utility poles and wires throughout Valley Center.

Within the Project boundaries, panel arrays would be electrically connected into panel strings using wiring attached to the racking. Panel strings would be electrically connected to each other via underground wiring. Gathering lines would connect individual panel array strings to one or more inverters/transformers and combiner boxes, and wiring from the panel strings would be connected to combiner boxes. Electrical current would then be transferred to the inverters which would convert the DC produced by the PV panels into AC. These lines would extend to the switchgear pad; refer to Figure 3A, Major Use Permit Plot Plan. From the switchgear pad, the line would be undergrounded to an existing SDG&E utility pole supporting a 12 kV (overhead) distribution line within the Cole Grade Road right-of-way. Where the line meets the existing utility pole, the line would be extended aboveground to connect to the existing SGD&E distribution line. As such, utility poles and overhead lines are located offsite and are already present within the visual landscape. The Project would not require replacement of or upgrades to any existing offsite utilities, and therefore, the Project would not result in a change to the existing visual appearance of the utility infrastructure in the area.

# PART III. THE DESIGN GUIDELINES

# 1. Site Design Process

# B. Site Design Concept

## 1. Relationship to the Community and Neighboring Properties

Does the site plan respect the existing views, privacy, quiet, sun and light exposure of neighboring properties?

The proposed Project components have been designed to minimize potential impacts on visual resources and to ensure that the Project does not conflict with the rural character of the surrounding Valley Center Community. Project design measures that limit the height and scale of Project components, as well as vegetative landscape screening along portions of the Project perimeter where public and/or private views into the site would potentially occur are proposed to reduce potential impacts on neighboring properties. Due to the limited height and scale of the Project components (maximum height of 12 feet for the PV panels and maximum height of 12 feet for the inverter enclosures/platforms, both as measured from the ground surface), the Project would not block access to sunlight on neighboring properties, and due to the operational character of the proposed PV solar facilities, impacts on surrounding land uses with regard to noise would be less than significant.

# 2. Relationship to Existing Natural Features

No Has the project made a sufficient effort to minimize grading and alteration of natural landforms?

Although the majority of land surface in the MUP area is flat, only limited portions would require grading to allow for installation of the panels and associated facilities. Therefore, the existing topography of the site would largely remain in its natural state.

Does the project retain important vegetation, rock outcroppings, and other natural features?

No rock outcroppings or other significant natural features are present within the existing natural onsite landscape. As noted above, the majority of land surface within the proposed MUP area is flat, and only limited grading would be required to allow for installation of the PV solar panels and associated facilities.

The PV solar panels would be installed in parallel rows running north/south; refer to Figures 3A and 3B, Major Use Permit Plot Plan. Although the majority of land surface in the MUP area is flat, portions would require minor grading and/or would be cleared and grubbed to allow for installation of the panels and associated facilities. The Project as proposed would require an estimated 6,000 cubic yards (c.y.) of balanced cut and fill. No offsite grading is required or proposed, with exception of minor grading within the Cole Grade Road ROW to widen the Project entrance to 24 feet in width and provide a driveway taper; refer to Figure 3C, Preliminary Grading Plan. Therefore, the topography of the site would largely remain in its natural state.

The Biological Constraints Report (ECorp Consulting, Inc., August 2015) prepared for the Project identifies two ephemeral drainages that traverse the central portion of the larger 66-acre property to the east of the proposed development area. The drainages support sensitive wetland habitat considered to be Waters of the U.S/State. The Project has been designed to avoid the drainages. The Biological Constraints Report also identifies biological resources (oak trees) on the site that must be avoided. A 50-foot wide buffer as measured from the drip line of the oaks is required; however, the Project has been designed to avoid these resources. Mitigation measures would be implemented to reduce Project impacts to a level of less than significant; refer also to the Biological Constraints Report, available under separate cover.

Further, as part of the Project design, and to the extent possible, existing citrus trees would be retained for screening purposes along portions of Cole Grade Road and Via Valencia (northern property line); refer to Figure 3D, Conceptual Landscape Plan. Existing sycamore, oak, and palm trees located adjacent to Cole Grade Road in the northern portion of the site would also be retained for purposes of screening.

## 2. Protection of Natural Features

## Guidelines

## A. Hierarchy of Importance.

- Development on all sites will require judgment about which natural features are most important to preserve. Although a consistent rule is not possible, the general order of importance in retention shall be:
  - (1) Natural contours and landforms;
  - o (2) Large rock outcroppings;
  - (3) Natural drainage courses;
  - o (4) Oak and sycamore trees;
  - o (5) Other mature specimen trees; and,
  - o (6) Views.

#### C. Other mature trees should be retained where feasible.

Ento This will require careful judgment weighing the value and hierarchy of all natural features, the size and species of the tree, and the developer's program for the site. This should not preclude removal of noxious or undesirable trees.

Refer to response to "2. Relationship to Existing Natural Features," above.

Potential impacts on visual resources resulting with implementation of the proposed Project would be reduced through design measures which include minimizing height and scale of the Project components within the landscape, distancing the Project components from adjacent public roadways, and providing landscape screening along portions of Cole Grade Road and Via Valencia to reduce potential public and private views into the development area.

#### D. Topography

Building pads are to be sited within the zoned setbacks and are to disturb the natural contours as little as possible. Balancing of cut and fill areas is encouraged. See "Save the Oaks and Sycamores" (Guideline 3) for grading techniques necessary for the preservation of existing oaks.

Refer to response to "C. Other Mature Trees Should be Retained Where Feasible," above.

#### F. Views

- Existing views important to neighboring properties shall be studied and preserved where feasible. New site plans for housing should take advantage of potential views from the site. Two types of views are important:
  - o Views from adjoining roads and lots through the site; and,

- Views from within the site.
- Natural features worth "viewing" include mountains, valley views, open spaces of existing flood plains, streams, lakes, tree stands, and western horizons.

No mountains, designated open space, flood plains, streams or lakes occur on the Project site. Views to the western horizon would generally be obscured, due to existing development and vegetation on adjacent lands, as well as the unvaried elevational differences of the Project site and surrounding lands. As stated above, the Project as designed would retain several rows of existing onsite citrus trees along Cole Grade Road and Via Valencia along the frontage. Design measures (e.g. landscape screening) are proposed to reduce the visibility of the site within the existing landscape and ensure that impacts to views of the valley within the surrounding viewshed are not significantly altered or disrupted with implementation of the proposed Project.

# 4. Design of the Road Edge – Valley Center, Cole Grade, Lilac, and Woods Valley Roads

## A. Landscaped Edge Zone

ED A minimum 20 feet deep landscaped zone (the front 20 feet of the property) shall be located along the major road edge, interrupted only by permitted access driveways and sidewalks. No buildings or off-street parking areas are to be located in this zone.

A minimum 20-foot wide landscaped edge zone consisting of both existing citrus trees and planted landscaping for screening purposes is proposed along the Project frontage on Cole Grade Road, consistent with requirements of the Valley Center Design Guidelines; refer to Figure 3D, Conceptual Landscape Plan.

Primary access is proposed off of Cole Grade Road in the central portion of the site; refer to Figure 3A, Major Use Permit Plot Plan. The access would be gated and locked (Knox box) and restricted to emergency and maintenance use only. Only minor improvements at the intersection of Cole Grade Road (widening of the road to 24 feet in width) would be required to allow for adequate access to the site. No buildings or off-street parking areas are proposed for location within the landscaped edge zone along Cole Grade Road.

#### C. Character and Elements

En The landscaped zone should reinforce Valley Center's character as a rural residential community. If walls or fences are used in landscaping, low walls of native stone, wooden rail fences, agricultural fences, placement of native rocks and boulders are recommended to give the road edge zone visual definition and prominence. Gateways and driveways may be given special emphasis.

Refer to response to "A. Landscaped Edge Zone," above.

#### E. Elements Not Acceptable.

End in link fences, wall over 3 feet high, fences over 42 inches high, unfinished concrete masonry walls, artificial stone walls or objects, dumpsters or trash receptacles, artificial plants or turf, decorative or commercial display objects, elements with highly-effective or bright-colored surfaces, and other objects which are frivolous, distracting, or not in harmony with the valley landscape and community design goals.

The Project as designed does not include the construction or use of any unfinished concrete masonry walls, artificial stone walls or objects, dumpsters or trash receptacles, artificial plants or turf, decorative or commercial display objects, elements with highly-effective or bright-colored surfaces, or other objects considered frivolous, distracting, or not in harmony with the existing valley landscape or community design goals.

Security would be maintained through installation of an (up to) 8-foot high chain-link fence around the perimeter of the MUP area. Per Section 6708 of the County Zoning Ordinance, maximum fence height for the Rural Residential zone (which applies to the Project site) is six feet. Fencing that exceeds a height of six feet is required to conform to the minimum setback standards established for main structures. Although the Project proposes an increase of two feet in the allowed fence height and would result in non-conformance with applicable setback requirements, such characteristics are not anticipated to substantially affect the existing community setting.

Further, as part of the Project design, and to the extent possible, existing citrus trees would be retained for screening purposes along portions of Cole Grade Road and Via Valencia; refer to Figure 3D, Conceptual Landscape Plan. Additional landscaping would also be planted along portions of Cole Grade Road and Via Valencia in front of the proposed chain-link fence to further screen views into the site from adjacent public/private vantage points.

### F. Signs in conformance with the Design Guidelines are permitted

Minimal Project signage is proposed to allow for the identification of the Project owner and for safety and security purposes. All Project signage would conform to County of San Diego signage requirements for the applicable zone.

Signage is proposed to be installed on the fence in the vicinity of the main entry gate(s). Signage would identify the Project operator and owner and would provide emergency contact information. Additionally, small-scale signage would be placed intermittently along the perimeter fencing on all exterior MUP boundaries to indicate "No Trespassing" and "Private Property" for security purposes, as allowed by County regulations. Illuminated signage at the Project entrance and each inverter station that notes the location and identification number of each electrical grid disconnect and circuit breaker would also be installed.

Illuminated signage at the Project entrance and each inverter station that notes the location and identification number of each electrical grid disconnect and circuit breaker would also be installed.

# 5. Architectural Character

# E. Walls, Fences and Accessory Structures

#### 1. Fences and Walls

- Ences and walls are used to provide security, visual privacy, and/or define a space. The impact of a fence or wall on the surrounding neighborhood is determined by its size, type, layout, and character. Fences and walls should be minimized along public streets.
- walls and fences should be designed to be compatible with the surrounding landscape and architectural concept.
- w The following is a list of wall and fence materials whose use is not acceptable:
  - o Chain link or open wire, except in landscape-screened service or security areas.
  - Corrugated metal
  - Bright colored plastic
  - Reed material

The Project would install an (up to) 8-foot tall chain-link fence for security purposes along the perimeter of the proposed development area, thereby contributing to the screening of views into the site from offsite public vantage points. Although the Valley Center Design Guidelines discourage the use of chain link fencing, the Project design includes landscaping (existing citrus trees and proposed plantings) along the perimeter of the fence to screen both views of the fence and of the Project components. The planting of such landscaping shall be made a Condition of Approval of the MUP to ensure that views of the Project components are minimized from such offsite public and private vantage points. Refer also to Figure 3D, Conceptual Landscape Plan, and Figures 7A to 7D which illustrate views of the constructed Project from adjacent public roadways.

# 8. Visual Linkages between Planting, Buildings, and Open Spaces

#### Guidelines

- En Tree masses are a valuable means of defining outdoor spaces and visually linking a site development to the larger community landscape.
- En Trees planted in rows along roads, site boundaries and in orchards are common in rural areas and may be used in similar patterns where site conditions suggest.

Several rows of the existing citrus trees would be retained along the Project boundary on portions of Cole Grade Road and Via Valencia to maintain the existing visual character of the site as a citrus orchard, while providing screening of the Project components. Additional

landscaping is proposed along the perimeter fencing to reflect the existing rural character of the surrounding community, as well as to screen views into the Project site from the roadway and provide a sense of visual continuity with adjoining properties along the road edge. The planting of such landscaping shall be made a Condition of Approval of the MUP to ensure that views of the Project components are minimized from such offsite vantage points.

# 9. Planting Design and Plant Lists

#### Guidelines

#### A. Planting Design Principles

- w Valley Center is a rural community. To protect its rural atmosphere, new plantings must be compatible with the existing natural landscape and desired community character, both in form and arrangement.
  - 1. Roadway and road edge planting on private property should reflect:
    - a. The natural grouping of trees in clusters, as opposed to traditional rigid alignment in urban areas.
    - b. Limited use of shrubs in plantings with trees and ground covers. Arid plant communities do not naturally support a great number of plants.
    - c. Naturalized plant arrangements as opposed to stylized.

Refer to response to "8. Visual Linkages between Planting, Buildings, and Open Spaces," above. All proposed landscape screening would be provided consistent with the Valley Center Design Guidelines and County landscape design requirements, as applicable.

# 11. Site Lighting

# A. General Requirements

Site lighting shall be limited to that necessary for security, safety, and identification. Other uses of site lighting for accent or decorative purposes is discouraged, except when provided by low-level fixtures and done in a careful manner. The Design Review Board will not recommend lighting plans that conflict with community character of provide excessive levels of lighting.

# D. Site Lighting Fixtures

x Fixtures should be compatible with the architectural character of the buildings served.

Limited Project lighting would be installed to allow for security. At a minimum, permanent lighting would be provided for the enclosure interiors; outdoor equipment access areas, such as at the inverters and switchgear; under equipment shade structures; and, at the site entrance. Low-level lighting would be installed at the main entry gates to facilitate access.

All lighting would be operated manually or activated via motion sensors and would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. All lighting would conform to County of San Diego outdoor lighting requirements. All outdoor lighting controls would incorporate dusk-to-dawn photocell controllers, occupancy sensors, and/or switches as appropriate. Lighting levels shall be as recommended in Illuminating Engineering Society (IES) standards. Suitable fixtures would be specified and installed according to the hazardous area classification, if applicable.