PROJECT DESCRIPTION
for the
DESERT GREEN SOLAR FARM

BORREGO SPRINGS
SAN DIEGO COUNTY, CALIFORNIA

Modification to Major Use Permit 3300-09-012 (P09-012);
ER No. 09-05-001A

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CHAPTER 1.0 PROJECT DESCRIPTION, LOCATION, AND ENVIRONMENTAL SETTING

1.1 Project Objectives

Desert Green Solar Farm LLC proposes to develop, finance, construct, and operate the proposed renewable energy Project (Project). The Project would use Concentrated Photovoltaic (CPV) systems sited in an area with abundant solar energy to generate clean, renewable electricity. A Power Purchase Agreement (PPA) has been signed by San Diego Gas & Electric (SDG&E) and approved by the California Public Utilities Commission (CPUC) to purchase the power output from the Project. The applicant's objectives for the Project are as follows:

- Assist in achieving the State's Renewable Portfolio Standard (RPS) and greenhouse gas emissions reduction objectives to the maximum extent possible by developing and constructing California RPS qualified solar generation.
- Minimize ratepayer funded major transmission upgrades by locating solar power plant facilities which have available line capacity to deliver the electrical energy from the Project to electrical "load centers."
- Site the Project in an area with excellent solar attributes (i.e., high direct normal irradiance) in order to maximize productivity from the CPV systems.
- Support the local economy through creation of long-term direct and indirect sustainable jobs from the local manufacture of the CPV modules as well as from the construction and on-going operations and maintenance of the solar energy facilities.
- Enhance the national economy by the manufacture of the majority of the other CPV system components in the United States.
- Assist the County of San Diego in accomplishing its renewable energy goals and achieving the primary energy objectives of developing alternative energy systems, as prescribed within the General Plan by using solar generation technology that has the least impact on the environment.

1.2 Consistency with California Global Warming Solutions Act of 2006 (AB 32)

Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, focuses on reducing GHG emissions in California, and requires the California Air Resources Board (CARB) to adopt rules and regulations that would achieve the equivalent of statewide

1990 GHG emissions by 2020. CARB has determined that the total statewide aggregated 1990 GHG emissions level, and consequently the 2020 emissions limit, is 427 million metric tons (MMT) of carbon dioxide equivalent (CO_2e). The target reductions to achieve this level of emissions are currently estimated to be 174 MMT CO_2e. The ARB AB 32 Scoping Plan contains the main strategies to achieve this cap. The GHG reduction strategies contained in the Scoping Plan include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system.

The Scoping Plan contains implementation strategies to achieve a reduction of approximately 80 MMT CO_2e, or 16% of California's projected 2020 "business-as-usual" emissions level of 507 MMT CO_2e, to achieve the 427 MMT cap noted above. The Scoping Plan also includes ARB-recommended GHG reductions for each emissions sector of California's GHG inventory, which includes a reduction of approximately 12 MMT CO_2e through the implementation of an RPS for electricity production. It is this specific reduction to which the Project will contribute.

The Scoping Plan emphasizes the role of local governments to meet the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions. The Scoping Plan expects a reduction of approximately 5 MMT CO_2e per year from local land use changes associated with implementation of Senate Bill (SB) 375, and encourages local governments to reduce GHG emissions by approximately 15% from 2008 levels by 2020.

The San Diego County General Plan, adopted August 2011, addresses climate change and reduction of GHG emissions in the Land Use, Mobility, Conservation and Open Space, and Housing Elements. One of the major strategies in the General Plan is to reduce the consumption of fossil fuels through the increased use of renewable energy sources. San Diego County also has a voluntary Green Building Incentive Program to promote energy and resource-efficient building design. Incentives, in the form of fast-track plan checking and fee reductions, are offered to developers which among other activities, includes the installation of photovoltaic electricity generation systems (solar power).

The Project would be consistent with and would contribute to achieving the goals set forth by AB 32. The Project would provide non-fossil-fuel-based electricity and would support the state's requirement for utilities to obtain 33% of all electricity from renewable sources, as well as reducing GHG emissions to 1990 levels by 2020.

1.3 Project Location

Figure 1, Regional/Local Vicinity Map, shows the Project's location within San Diego County and its proximity to the surrounding unincorporated community of Borrego Springs.

Specifically, the Project site is located approximately 0.45 mile north of Palm Canyon Drive, and one mile east of Borrego Valley Road. The Borrego Valley Airport is located approximately 0.30 mile to the south of the southern border of the Project site.

The land to be developed with the solar CPV systems is comprised of one main parcel, with additional lands affected to support the transmission of power generated to the existing Borrego Substation, and for purposes of access and utility installation (water line). The County Assessor Parcel Number (APN) for the main facilities is APN 141-230-26 (288.29 acres, or approximately 288 acres). Additional parcels potentially affected by Project improvements may include APNs 141-210-04, -05, -06, -25, and -26 [site access, generation-tie (Gen-tie) line, and/or water line easement]; APNs 141-230-33 and -38 (private water line easement); and/or, APN 141-060-08 (12kV Borrego Valley Road Gen-tie Route). A more detailed description of these improvements is provided below under Section 1.4, Project Description.

1.3.1 Environmental Setting

The Project site is presently undeveloped, vacant land. Vegetation on the Project site largely consists of desert saltbush scrub and stabilized and partially stabilized desert dunes, with sparse groundcover consisting of a mixture of Mediterranean grass and mustard. Soil types found on the affected parcel also generally supports bur-sage, saltbush, and annual grasses and forbs. Some native wildflower species occur intermittently, with a number of dead mesquite trees also present in various onsite locations.

The overall topography descends gradually from northwest to southeast across the region. Although the topography of the Project site is generally flat, there are a series of low dune ridges with hummocky areas throughout. Onsite elevation generally ranges from approximately 529 to 554 feet above mean sea level (amsl).

The Project site is within the Borrego Springs Community Planning Area of San Diego County's General Plan. The General Plan land use category is Rural Lands with a permitted density of one dwelling unit per 40 acres (RL-40). Existing zoning is General Rural (S92).

1.4 Project Description

Desert Green Solar Farm LLC is requesting a Major Use Permit (MUP) modification to previously-approved MUP 09-012 for the purpose of authorizing a CPV solar farm Pursuant to Section 6952 of the Zoning Ordinance. The Project would be constructed to have a net capacity of 6.5 megawatts (MW) of solar energy. The Project would consist of approximately 308 concentrating photovoltaic electric generation systems utilizing dual axis tracking ("CPV Trackers") on the westerly portion of a 288.29-acre (approximately 288 acres) parcel in northeastern San Diego County near the unincorporated community of Borrego Springs, California. In addition to the CPV systems, the Project would include the following components:

- 12kV Generation tie line (Gen-tie): SDG&E 12kV Line Extension to Existing Borrego Substation following an existing 20' SDG&E easement (under CPUC land use jurisdiction); or, 12kV Borrego Valley Road Gen-tie Route to existing Borrego Substation (underground) following an existing 50' easement (on privately-held lands). Refer to Section 1.4.1.6, 12kV Gen-tie Route, below.
- Up to five dual or triple inverters and transformers
- 300 square foot (s.f.) onsite metal storage building (within a 1,000 s.f. breakaway-fenced and screened storage yard)
- 15' diameter 10,000 gallon water reservoir, plus an optional 10,000 gallon water reservoir
- 12kV switchgear to protect the Project equipment from any short-circuits occurring on the Gen-tie line
- Ultra Capacitor Storage Unit
- Supervisory control and data acquisition (SCADA) system enclosure (10' by 30')
- 4" water line extended from Palm Canyon Drive (West Water Line or East Water Line alignment options); refer to Section 1.4.2.3, Water Line Extension, below.
- 93,300 cubic yards of grading (balanced cut and fill)
- One 100kW emergency generator on a 12' by 20' concrete pad
- Primary Access: Primary access would occur via the proposed Palm Canyon Drive Access Route or the Borrego Valley Road Access Route; refer to Section 1.4.2.2.4, Internal and External Access Roads, below. Primary access would be provided via construction of a 24' wide all-weather surface primary access road within a 28' wide graded width (in accordance with County of San Diego Fire Standards and capable of supporting 50,000 lbs).

- Interior Circulation: 24’ wide interior fire access and perimeter loop roads; and, interior 18’ wide service roads.
- 30’ fuel modification zone (FMZ)
- 15’ wide trail dedication to the County (trail construction not proposed)
- 124.68 (approximately 125) acres of biological open space dedicated to the County (to remain unfenced and signage for identification purposes installed)
- 6’ perimeter breakaway fencing with one foot of 3-strand security barbed wire

The Project would be constructed in one phase. The Project applicant has a 6.5 MW Power Purchasing Agreement (PPA) from SDG&E. The Project would interconnect at 12,000 volts (12kV); therefore the majority of the electrons would not leave the local distribution circuit. Network upgrades are not required because the Project has an energy only interconnection position. There are no improvements needed to the recently expanded Borrego Substation because the Project would connect to an existing four-way switch that is already constructed in the Substation.

Desert Green Solar Farm LLC is requesting a MUP modification to previously-approved MUP P09-12 on the 288-acre parcel. The previously-approved project included the 288-acre parcel and the 104-acre parcel located directly adjacent to the south (APN 141-230-33; P09-14). The proposed Desert Green Solar Farm does not include the 104-acre parcel (P09-014) as part of the Project, and is instead limited to development of the 288-acre parcel and additional lands for access/utility easement purposes.

The Project would involve the construction of an approximately 45-acre solar energy electrical generation facility to provide electricity for public consumption. The proposed facilities would have an overall capacity of approximately 6.5 MW, serving the Borrego Valley area. Of the approximately 288 acres, the proposed development area where the trackers would be installed, including the portion of the 12kV Gen-tie line/access route and temporary laydown yard (five acres), would total approximately 50.63 acres. An additional 2.61 acres on the 288-acre parcel would accommodate a 15-foot wide trail easement along the northern and western property boundaries (no improvements proposed at this time); however, the trail easement is not included within the Major Use Permit boundary. Approximately 125 acres of the 288-acre parcel would be dedicated as undisturbed onsite open space for biological mitigation purposes (to remain unfenced with intermittent small-scale signage installed along the perimeter); refer to Figure 2, Aerial Photograph; Figures 3A to 3C, Major Use Permit Plot Plan; and, Figure 3D, Assessor Parcel Map/Potentially Affected Lands, for illustration of the proposed Project layout and design. The remainder of the parcel (approximately 110 acres) would remain undeveloped and in its current natural state (unfenced).

Proposed Project improvements would consist of an all-weather access easement serving the Project site from either Palm Canyon Drive or Borrego Valley Road; refer to Section 1.4.2.2.4, Internal and External Access Roads, below. Additionally, a Gen-tie line would be installed from the Project site to the Borrego Substation via either the SDG&E 12kV Line Extension Route or the Borrego Valley Road Gen-tie Route; refer to Section 1.4.1.6, 12kV Gen-tie Route, below. Additionally, water would be supplied to the Project site via one of two optional routes via a 4-inch private water line to be extended from Palm Canyon Drive, as shown on the MUP Plot Plan; refer to Figure 3D, Assessor Parcel Map/Potentially Affected Lands, and Section 1.4.2.3, Water Line Extension, below.

The Project as currently designed represents a number of minor modifications to the overall design of the solar energy project previously-approved by the County on the 288-acre parcel and the adjacent 104-acre parcel to the south under MUPs 09-012 and 09-014, respectively. The Project would be permitted under a Major Use Permit modification application to MUP P09-012. Major Use Permit P09-014 is not a part of the proposed Desert Green Solar Farm Project and would not be developed by Soitec Solar Development LLC.

As compared to the previously-approved project, the proposed Project design would reduce the development footprint (area of disturbance) on the 288-acre parcel to 50.63 acres for the solar facilities; however, overall disturbance for the entire Project (temporary laydown yard, solar field, trail easement, and options for access, Gen-tie route, and utility easements) would be approximately 66.89 acres. An additional 125 acres of the 288-acre parcel would be dedicated as undisturbed open space for biological mitigation purposes. The remainder of the parcel (approximately 110 acres) would remain undeveloped and in its current natural state. The Project would also reduce the overall power output to 6.5 MW (as compared to 35-40 MW as was previously approved).

The proposed Project would utilize CPV technology, rather that PV technology. While the CPV systems would have a limited height of 30 feet compared to the previously-approved 10-foot high PV systems, the overall footprint of disturbed land for the CPV systems would be 15% of the total land utilized compared to 100% for the PV system. Therefore, the overall visual impacts of the proposed CPV system would be materially less than the previously-proposed PV project. Additionally, the proposed Project would avoid the need to construct an onsite substation, would reduce the number of inverter stations to five (maximum), and would underground the transmission Gen-tie line to avoid potential visual effects of above-ground lines or new/replacement utility poles, in contrast to the previously-approved project as designed.

The following sections provide a summary of the Project components including proposed equipment, facilities, and infrastructure. Additionally, an overview is provided of the anticipated construction process and timing and of Project operation and maintenance activities, as well as potential environmental impacts that may result with these activities.

1.4.1 Solar Generation Components

1.4.1.1 Module

Soitec's Concentrix modules are made up of a glass lens plate (Fresnel lens) and a base plate on which high-performance solar cells are mounted. The Fresnel lens focuses sunlight concentrated by a factor of 500 on the solar cells beneath; refer to Photo 1.

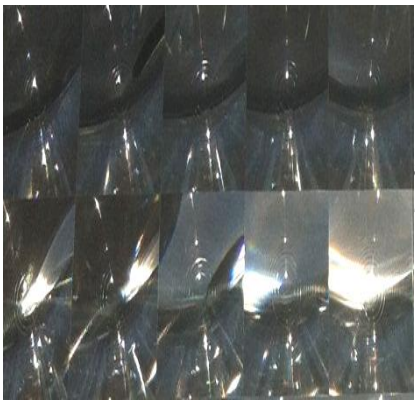


Photo 1: Fresnel lens.

The solar cells are optimized III-V-based triple-junction solar cells (GAInP/GaInAs/Ge) in which three different types of solar cells are stacked on top of one another. Each cell is designed to convert a certain range of the solar spectrum: short wave radiation; medium wave radiation; and, infrared. For almost 20 years, multi-junction solar cells were used in space applications.

The solar modules are lightweight and surrounded by airflow both inside and outside the module. As a result, heat dissipates quickly from a solar panel. The module temperature is dependent on the ambient temperature, solar radiation intensity and wind. The normal operating condition temperature for solar panels is 20 degrees Celsius (°C) above ambient temperature, therefore, on a typical summer day at 40°C, the panel temperature would be approximately 60°C, or 172°F whereas on a typical winter day at 20°C, the panel temperature would be 40°C or 104°F. Although the panels would be hot to the touch, they would not noticeably affect the temperature of the surrounding area. The temperatures below the tracker assembly would be nearly the same if the tracker assembly were constructed out of wood or cloth.

1.4.1.2 CPV System

The CPV system uses a dual-axis tracking system; refer to Photo 2. Two types of sensors are used to ensure that the focal point of the concentrated sunlight is exactly on the cells at every moment of the day: 1) astronomical positioning; and, 2) a solar sensor that seeks to position the CPV system precisely perpendicular to the sun to ensure optimum system performance.

The entire CPV system module assembly dimensions are approximately 48 feet across by 25 feet high; refer to Figure 3C, Major Use Permit Plot Plan – Elevations/Details. Each CPV system unit would be mounted on a 28-inch steel mast (steel pole) that would be supported by either: (i) inserting the mast into a hole approximately 20 feet deep and encasing it in concrete; or, (ii) vibrating the mast into the ground approximately 20 feet deep, exclusive of the scour depth. The spacing between the tracker units would be 82 feet measured east to west and 69 feet measured north to south.

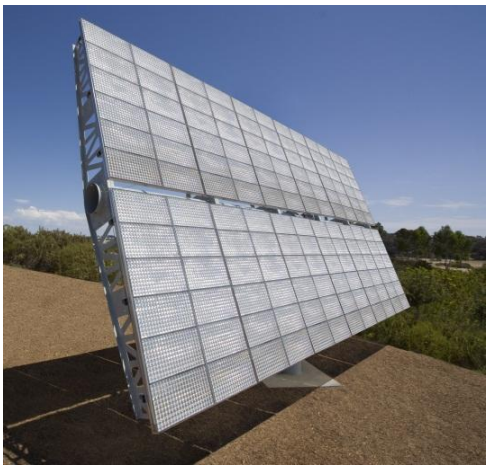


Photo 2: CPV dual-axis tracking system.

In its most vertical position and depending on foundation design, the top of each tracker would not exceed 30 feet above grade, and the lower edge would not be less than one foot above the base flood elevation (which is one foot above ground surface level). In its horizontal "stow" mode (for high winds), each tracker would have a minimum ground clearance of 13 feet - 6 inches. At night, the trackers would be positioned vertically to minimize dust collection.

1.4.1.3 CPV System Configuration

The Project would install approximately 308 CPV systems. The CPV systems would be arranged into Building Blocks ("BBs") with each BB consisting of (i) an inverter/transformer station with two inverters and a transformer.

1.4.1.4 Inverter/Transformer Stations

Inverters within each inverter station convert the DC power from the solar modules to AC power. Up to five inverter stations would be installed with the Project. The inverter stations would include a medium voltage transformer to step-up the voltage from the inverter to a nominal 12kV which is compatible with the local SDG&E distribution system. Each inverter station would be constructed on a 10 foot by 40 foot concrete pad/skid. The inverter stations would be located on piers with the lower edge of the foundation skid being no less than one foot above the base flood elevation (which is one foot above ground surface level).

The internal equipment within each inverter station would be pre-wired and mounted on a skid for easy installation. A canopy or shade structure would cover each

inverter/transformer station for cooling purposes and to shield the equipment from the elements.

1.4.1.5 Underground Collection System

Power would be collected from each CPV system in a Building Block and delivered to an inverter through a 1,000 volt DC underground collection system. The AC power from each inverter station would be collected and delivered to 12 kV switchgear, which serves as the connection point to the Gen-tie line, through 3-phase underground 12kV rated cable.

1.4.1.6 12kV Gen-tie Route

In order to transfer the power generated from the solar facility to the Borrego Valley Substation, the Project would utilize either the 12kV Borrego Valley Road Gen-tie Route or the SDG&E 12kV Line Extension Route, as shown on the MUP Plot Plan; refer to Figures 3A and 3B.

The POI for the Borrego Valley Road Gen-tie Route would be at the Borrego Valley Substation. The 12kV line would be undergrounded within an existing 50-foot wide access and utility easement on private lands (APN 141-060-08). The Borrego Valley Road Gen-tie Route would start at the Borrego Substation and follow the Borrego Valley Road Access Route (see Section 1.4.2.2.4, Internal and External Access Roads, below) east to a point near the northwesterly corner of the Project site, cross the existing SDG&E easement, run through a portion of the neighboring Cocopah nursery, and then trend southward to the Project boundary via the 30-foot wide Gen-tie Route. The Gen-tie Route would be part of the Major Use Permit boundary.

The 12kV SDG&E Line Extension Route would be located within the existing 20-foot wide SDG&E easement (Record #72-3377663) that extends from the Borrego Substation easterly to the POI near the northwesterly corner of the Project site. From the POI, the 12kV underground Gen-tie line would trend southerly across the adjacent Cocopah nursery, and then trend southward to the Project boundary via the 30-foot wide Gen-tie Route. All improvements to the 12kV line extension would be completed by SDG&E and are under the land use authority of the CPUC, pursuant to General Order 131D. Although the 12kV line extension is under jurisdiction of the CPUC, the analysis of the line extension is included in the Mitigated Negative Declaration (MND) for the Project for purposes of consistency with the California Environmental Quality Act (CEQA). The 12kV line extension is not included in the Major Use Permit because it is not within the County's land use jurisdiction. Therefore, improvements within the SDG&E easement would not be a part of the Major Use Permit boundary.

1.4.1.7 12 kV Switchgear/Ultra Capacitor Storage Unit

The 12 kV switchgear would be constructed on a 10-foot by 10-foot (100 s.f.) concrete pad located at the northwesterly portion of the site. The pad would be constructed such that the lower edge of the foundation would be no less than one foot above the base flood elevation (which is one foot above ground surface level). The Ultra Capacitor storage unit would be located adjacent to the switchgear. The equipment would be located on a 10 foot by 40 foot concrete pad on piers.

1.4.1.8 Control System

Operation of the Project would require monitoring through a SCADA system. The SCADA system would be used to provide critical operating information (e.g., power production, equipment status and alarms, and meteorological information) to the power purchaser, Project owners and investors, grid operator, and Project operations teams, as well as to facilitate production forecasting and other reporting requirements for Project stakeholders. One 10-foot by 30-foot (300 s.f.) structure would be constructed on a pad to house the SCADA equipment, as shown on the MUP Plot Plan; refer to Figure 3B. The pad would be constructed on a pad such that the lower edge of the foundation would be no less than one foot above the base flood elevation (which is one foot above ground surface level).

1.4.1.8 Storm Positioning System and Back-Up Power Supply

The storm positioning system would bring the CPV systems into the horizontal position ("Storm Position") in case there is an approaching storm that could be damaging to the CPV system. A switch would be installed inside of the entrance gate to the site to allow authorized Project personnel and emergency service providers to automatically place the CPV systems in a wind stow position. For the storm positioning system to function correctly, it must:

- Adequately detect a damaging storm and be able to communicate a Storm Position command to each CPV system; and,
- Have a reliable supply of electrical energy to power each CPV system into the Storm Position.

A 100kW emergency generator would also be located onsite to provide power to place the CPV systems in the stow position in the event that power from the local utility is lost and high winds occur. The emergency generator would be placed on a 12-foot by 20-foot concrete pad. Each pad would be constructed such that the lower edge of the

foundation would be no less than one foot above the base flood elevation (which is one foot above ground surface level).

1.4.2 Project Components and Details

1.4.2.1 Operations and Maintenance

The proposed onsite storage building would consist of a 300 s.f. metal structure, located within a 1,000 s.f. breakaway-fenced and screened storage yard (chain link of 6-foot height with interwoven slats). The facility would be unmanned. The structure's foundation would be constructed such that the lower edge of the foundation would be no less than one foot above the base flood elevation (which is one foot above ground surface level).

1.4.2.2 Security, Fire Protection, Maintenance and Security Lighting, and Internal and External Access Roads

1.4.2.2.1 Security

The Project site would be fenced along the entire property boundary for security with fencing that meets National Electrical Safety Code (NESC) requirements for protective arrangements in electric supply stations. Examples of acceptable fencing may include a six foot chain-link perimeter fence topped with one foot of three-strand barbed wire. All perimeter Project fencing would be "breakaway" type fencing to ensure that the fence gives way in the event of a flood, thereby eliminating potential obstruction of the flow of floodwaters and associated debris.

Signage in both Spanish and English would be placed along the perimeter fencing to warn the public of the presence of high voltage and the need to keep out. Signage would also be placed within the Project site where appropriate. Some localized security-related lighting, onsite security personnel, and/or remotely monitored alarm systems may be required during construction and/or operations. Perimeter and safety lighting would be used only on an as-needed basis for emergencies, protection against security breach, or unscheduled maintenance and trouble-shooting.

1.4.2.2.2 Fire Protection

The Project site is located within and served by the Borrego Springs Fire Protection District (BSFPD). To comply with the fire code, clearing and grubbing, as necessary, in localized areas would be required for construction and access. Additionally, a Fire

Protection Plan (FPP) has been prepared for the Project and is included with the application. The FPP proposes the following fire prevention measures:

- One 10,000 gallon onsite water storage tank with fire department connection; one optional 10,000 gallon onsite water storage tank
- County-approved access gates with Knox box locks
- 30' perimeter fire buffers (measured inward from fence)
- Illuminated signage at Project entrance and each inverter station that notes the location and identification number of each electrical grid disconnect and circuit breaker. Signage would also be placed at the ends of each interior fire access road to indicate those roads that are intended for use by emergency vehicles.
- Emergency responder training for each shift
- Weed whipping and maintenance of areas under panels/arrays
- Interior Access Roads (Fire): 24' wide all-weather surfaced interior fire access and perimeter looped roads having a load bearing capacity rating of 50,000 lbs. An override switch would be installed inside of the entrance gate to the site to allow authorized Project personnel and emergency service providers to automatically place the CPV systems in a stow position.

1.4.2.2.3 Maintenance and Security Lighting

Lighting at the Project site would be designed to provide security lighting and general nighttime lighting for operation and maintenance personnel, as may be required on occasion. Lighting would be shielded and directed downward to minimize any effects to surrounding properties and would be used only on an as-needed basis.

Lighting would be provided next to the entrance door to the storage building and mounted at the entrance gates to allow for safe entry. Since maintenance activities are not anticipated to occur during the evening hours, lights would only be turned on if needed. All Project lighting would utilize light bulbs that do not exceed 100 watts. All lighting would be shielded, directed downward, and would comply with the County of San Diego Light Pollution Code Section 59.101 et.al.

1.4.2.2.4 Internal and External Access Roads

There are three different types of roads for the Project that would be improved to different standards: primary access, fire access, and service roads. All road surfaces

would have a permeable non-toxic soil binding agent in order to reduce fugitive dust and erosion.

Primary Access Road: Operation, maintenance, and construction activities for the Project would take access from either the proposed Palm Canyon Drive access route or the proposed Borrego Valley Road access route, as shown on the MUP Plot Plan; refer to Figures 3A and 3B. Both access routes are included as part of the Major Use Permit boundary.

The Palm Canyon Drive access route would include construction of a 24-foot wide all-weather paved access drive within a 28-foot wide graded width, located within existing 30-foot wide private utility and access easements. This route would connect to the facility at the southwesterly corner of the solar field. The Palm Canyon Drive access route may also include construction of the westerly water line extension, as described under Section 1.4.2.3, below.

The Borrego Valley Road access route would include construction of a 24-foot wide all-weather paved access drive within a 28-foot wide graded width, located within a 50-foot wide private utility and access easement. The Borrego Valley Road access route would connect Borrego Valley Road to the northwesterly corner of the solar field. This access route would follow along a portion of an existing dirt road north of the existing 20-foot wide offsite SDG&E utility easement, cross the SDG&E easement near the northwest corner of the site, continue thru the Cocopah nursery, and then head south to the solar facility. The Borrego Valley Road access route would also include the (underground) 12kV Borrego Valley Road Gen-tie Route, as described under Section 1.4.1.6, above.

The primary access road would be improved to a graded width of 28 feet with 24 feet of all-weather surface in accordance with County of San Diego Fire Standards. The purpose of the primary access road is to allow for two-way access of fire apparatus and to provide access from Palm Canyon Drive to the Project site. A fire department turnaround would be provided at the end of the primary access road at the entrance to the Project. The road would be designed and maintained to support the imposed loads of fire apparatus (not less than 50,000 lbs.) and would have an approved surface so as to provide all-weather driving capabilities.

Interior Access Roads (Fire): A series of north/south interior fire access and perimeter loop roads would be constructed to a width of 24 feet (fire access road widths may be administratively reduced with the approval of the County Fire Marshal and Borrego Springs Fire Protection District) in accordance with County of San Diego Fire Standards. The interior access roads would be designed and maintained to support the

imposed loads of fire service apparatus (not less than 50,000 lbs) and would have an approved surface so as to provide all-weather driving capabilities. These interior fire access roads would be constructed between every fourth row of north-south trackers to facilitate a maximum fire hose pull of 160 feet. In addition, the Project includes east/west running fire access roads for connectivity and circulation. The purpose of the interior fire access roads is to allow for access of fire service apparatus throughout the Project site and in order to reach the inverter/transformer units.

Service Roads: On the north/south rows where the interior fire access roads are not proposed, service roads would be constructed to a width of 18 feet and would be constructed and maintained to support the imposed loads of not less than 15,000 lbs and support panel washing equipment vehicles. Service roads would run in a north-south direction along the west side of the columns of the CPV systems, except where there would be a fire access road that would facilitate access to the CPV systems and inverter stations.

1.4.2.3 Water Line Extension

Water supplies for maintenance of the Project would be delivered to the site via either the West Water Line or the East Water Line, as shown on the MUP Plot Plan; refer to Figures 3A and 3B. The water line would connect to the proposed onsite water tank(s).

The West Water Line would be located within the proposed Palm Canyon Drive access route. The water line would be extended from its point of connection (POC) with an existing water line that lies within Palm Canyon Drive. The West Water Line would be included as part of the Major Use Permit boundary.

The East Water Line would be located within an existing dirt road traversing the Borrego Valley Airport property. The water line would be extended from its POC with an existing water line that lies within Palm Canyon Drive. The East Water Line would not be included as part of the Major Use Permit boundary and is considered an offsite improvement under the authority of the Federal Aviation Administration (FAA).

1.4.2.4 Traffic and Circulation

1.4.2.4.1 Construction Traffic

The Project would be constructed over a period of approximately six months. Trip generation for employees and delivery trucks would vary depending on the phase of construction. Based on an estimated seven round trips per tracker (308 total trackers) for both delivery trucks and workers, the total construction trip generation for completion

of all work at the Project site would be 2,156 round trips, or approximately 14 round trips per workday (total construction trip generation [2,156 round trips] divided by construction timeframe [156 workdays]). It is assumed that all employees would arrive within the morning peak hour and depart within the evening peak hour, and delivery truck trips would be distributed evenly throughout a typical 8-hour-shift/day. Since the surrounding area is rural, traffic is very low on the local roads surrounding the Project site. Implementation of the Project would result in a temporary increase in traffic along these roads, but not to the level of the road carrying capacity. No road closures are anticipated during Project construction. The construction contractor would develop a Traffic Control Plan to ensure safety and efficient traffic flow in the area and on the Project site. The Traffic Control Plan would be prepared in consultation with the County of San Diego and would contain Project-specific measures for noticing, signage, policy guidelines, and the limitation of lane closures to off-peak hours (although it is noted that no requirement for lane closures has been identified).

1.4.2.4.2 Ongoing Traffic

During the operations phase of the Project, approximately three personnel on average would be onsite at any given time. A list of past, present, and reasonably foreseeable future development projects occurring within the area is currently being developed in conjunction with the County. If cumulative traffic impacts are anticipated with implementation of the Project, they would be mitigated by payment of a Transportation Impact Fee (TIF) or other method acceptable to the County.

1.5 Construction

1.5.1 Construction Schedule

Pending any unperceived processing delays, the construction of the Desert Green Solar Farm Energy Project is anticipated to commence in 2nd quarter 2013 and would require approximately six months to complete. Table 1-1, Proposed Desert Green Solar Energy Project Construction Schedule, provides the proposed schedule for the Project. While the Project schedule may be modified due to the date of County of San Diego approval, as well other Project approval/permits (see Section 1.9 below for a list of anticipated approvals/permits), this table illustrates the approximate duration of major Project activities. Construction activities would occur between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday.

Table 1-1
Proposed Desert Green Solar Energy Project Construction Schedule

Project Activity	Duration (months)
MUP approved	1st quarter 2013
Acquisition of additional required permits	1st quarter 2013
ROW/property acquisition	1st quarter 2013
Construction begins	2nd quarter 2013
Completion of construction	4th quarter 2013
Project operational	4th quarter 2013

1.5.2 Construction Activities and Methods

Project construction would consist of site preparation (described above), development of staging areas and site access roads, solar CPV system assembly and installation, and construction of electrical transmission facilities. After site preparation, initial Project construction would include the development of the staging and assembly areas and the grading of site access roads for initial CPV system installation as follows below.

1.5.2.1 Site Preparation & Grading

Clearing and Grading: Construction of the Project would involve clearing and grubbing of the existing vegetation on approximately 66.89 acres; grading necessary for construction of access roads and CPV system foundations; trenching for the electrical collection system communication lines, four-inch water line; and, Gen-tie line to the SDG&E Borrego Substation. A Major Grading Permit would be required for the removal and re-compaction of approximately 5" of upper soil, plus undercut associated with access, service/fire roads. Although the majority of land surface on the affected parcel is generally flat, limited portions of the parcel would be graded to provide a ground surface that can adequately accommodate the CPV solar panels. Grading would require an estimated 93,300 cubic yards (c.y.) balanced cut and fill. There would be no import or export of soils with the Project.

Collection System Trenching: Trenching requirements for the AC Gen-tie line and DC electrical collection system, and telecommunication lines within each building block would consist of a trench up to approximately 3'-4' deep and 1'-2' wide. The trenches would be filled with base material above and below the conductors and communications lines to ensure adequate thermal conductivity and electrical insulating characteristics. The topsoil from trench excavation would be set aside before the trench is backfilled and would ultimately comprise the uppermost layer of the trench. Where possible,

trenching would be located beneath roads to minimize disturbance. Excessive material from the foundation and trench excavations would be used for site leveling.

Foundations: Each CPV system would be installed on a 28-inch diameter steel mast. One foundation design calls for the mast to be concrete-encased below grade and to extend to a depth approximately 20 feet below the scour depth. The preferred installation is to install the mast to the necessary depth, approximately 20 feet below the scour depth using a vibration pile-driver.

Soil Stabilization: In order to reduce fugitive dust and erosion, the disturbed areas, including access roads, would either be treated in one of the following three methods, or a combination of all three:

- Treatment with a permeable non-toxic soil binding agent (Preferred Method)
- Placement of disintegrated granite (DG) or other base material (Optimum for Roads)
- Seeding with native seed mix (this method would rarely be used due to the fire clearing requirements)

1.5.2.2 CPV System Construction Overview

Construction staging and material lay-down areas would be distributed across the Project site evenly to allow for efficient distribution of components to different parts of the Project. Lay-down areas would be sited within the boundaries of the Project site. These lay-down areas would be temporary and CPV systems would be installed as work is completed in the general area.

Project construction would then include several phases occurring simultaneously with the construction of: (1) CPV systems, including the assembly of trackers, driven piles or drilled piers for the support masts, and the placement of trackers on the support masts; (2) trenching and installation of the DC and AC collection system; (3) construction of the Gen-tie line; (4) construction of the storage building/storage yard; and, (5) grading of fire access and service roads. Tracker assembly may require small gas-powered generators to power hand tools for the assembly of trackers and modules.

Approximately 10 acres within the proposed development area on the 288-acre parcel would be disturbed on a given day during the construction period. Once construction is completed, approximately 45 acres (of the entire 288-acre Project site) would remain permanently disturbed with Project facilities and/or fuel modification improvements.

Tracker Assembly Areas: Trackers would be assembled onsite in 10,000 s.f. temporary assembly tent structures. The tracker modules need to be fabricated in a clean work environment that would be provided by the tents. Recycling during construction would be in compliance with the County of San Diego Construction Demolition and Debris Management Plan (in accordance with County Ordinance 68.508-68.518).

1.5.2.3 Control Room and Storage Building

A 300 square foot unmanned metal storage building is proposed onsite. The structure would be constructed on piers, not less than one foot above base flood elevation (which is one foot above ground surface level), to ensure that potential damage from flooding is avoided.

1.5.2.4 12kV Gen-Tie Line

As stated above, two options for the 12kV Gen-tie line are proposed: the SDG&E 12kV SDG&E Line Extension and the 12kV Borrego Valley Road Gen-tie Route. The 12kV SDG&E Line Extension to the existing Borrego Substation would extend westerly from the Project site to the POI, then follow an existing 20' wide SDG&E easement to the Borrego Substation. The easement is under CPUC land use jurisdiction and extension of the line within the easement would not be permitted or constructed under this action. The Borrego Valley Road Gen-tie Route would run westerly from the Project site to an existing 50-foot wide private access and utility easement (underground) that extends to the Borrego Substation. Refer also to Section 1.4.2.2.4, Internal and External Access Roads, above, for a more detailed description.

1.6 Ongoing Operations and Maintenance

Following the construction phase, it is anticipated that maintenance of the facilities would require the presence of two to three full-time employees to perform visual inspections, cleaning, and minor repairs once per week, on average.

The Project facilities would be remotely monitored during operating (daylight) hours, even though the facilities would be capable of automatic start up, shutdown, self-diagnosis, and fault detection. Appropriate levels of security lighting would be installed at the storage/control building. The site would be secured via remote security services with motion-detection cameras.

1.7 Decommissioning and Repowering

If constructed, the Project would operate, at a minimum, for the life of its long-term Power Purchasing Agreement (PPA). The initial term of the PPA is for 25 years; the lifespan of the solar facility is estimated to be 30 years or longer. It is likely, due to the establishment of the Project infrastructure (both physical and contractual), that the continued operation of the Project for a longer term beyond the initial PPA term is feasible. At the end of the useful life of the Project, two alternative scenarios are possible: (1) Re-tool the technology and contract to sell energy to a utility; or, (2) If no other buyer of the energy emerges, the solar plant can be decommissioned and dismantled. This discussion herein only addresses the decommissioning and dismantling of the facility and reuse of the land.

1.7.1 Decommissioning and Recycling

Decommissioning would first involve removing the CPV modules for sale into a secondary solar CPV module market. The Project's module component materials do not have toxic metals such as mercury, lead, or cadmium telluride; however, each module contains solar cells that contain a trace amount of gallium arsenide (less than 2.5% of the entire cell) that can be safely removed and properly disposed of offsite when the panels are recycled.

The majority of the components of the solar installation are made of materials that can be readily recycled. For example, the aluminum and glass that make-up most of the material in the module can be recycled. Electrical equipment such as the inverters, transformers, and switchgear can be either reused or their components recycled. The equipment pads are made from concrete which can be crushed and recycled. Underground cables and wires can be removed by opening trenches, pulling up the cables and wires, and backfilling when done. The electrical wiring is made from copper and/or aluminum and can be reused or recycled.

1.7.2 Dismantling

Dismantling the Project would entail disassembly of the solar facilities and substantive restoration of the site. Impacts associated with closure and decommissioning of the Project site would be temporary and would span three basic activities: (1) disassembly and removal of all detachable above-ground elements of the installation; (2) removal of tracker masts and any other structural elements, including those that penetrate the ground surface to a depth of two feet below grade; and, (3) reuse of the land consistent with the County Zoning Ordinance, which could include ground surface restoration to

surrounding grade. The following are the steps needed to dismantle the Project components and return the Project site back to a conforming use:

1. The above-ground (detachable) equipment and structures would be disassembled and removed from the site. Detachable elements include (i) all trackers, inverters, transformers, and electrical collection lines within the solar field; (ii) transformers, breakers, disconnects, bus work, control house within the Project substation; and, (iii) the Gen-tie lines. The majority of these materials can be recycled or reclaimed. Remaining materials would be limited and would be contained and disposed of offsite consistent with the County of San Diego Construction Demolition and Debris Management Plan (County Ordinance 68.508-68.518).

2. Removal of tracker masts would entail vibration extraction if the masts were initially installed using conventional pile-driven techniques. For tracker masts that were inserted into a hole and supported by concrete encasements, the masts and concrete would be removed to a depth of two or more feet. Any spread-foot foundations used for supporting electrical equipment on structures would be removed to a depth of two feet. The tracker masts would be recycled and the concrete would be disposed of, or recycled, offsite.

3. Removal of underground collector and transmission cables and associated facilities would either be abandoned in place or removed as required.

4. The land would be returned to a use that is consistent with the County of San Diego Zoning Ordinance at the time of dismantling.

5. If a new use is not proposed, the decommissioning would include removal of all components down to a depth of two feet, applying a soil stabilization agent such as a non-toxic permeable soil binding agent. These activities would be consistent with the current zoning of General Rural (S92) or future applicable zoning.

1.7.3 Removal Surety

A final Decommissioning Plan would be provided prior to issuance of the building permits for the Project, and would comply with Section 6952.b.3 (d) of the County of San Diego Zoning Ordinance for removal surety as follows:

The operator shall provide a security in the form and amount determined by the Director to ensure removal of the Solar Energy System. The security shall be provided to the County's Department of Planning and Development Services prior to building permit issuance. Once the Solar Energy System has been removed from the property,

pursuant to a demolition permit to the satisfaction of the Director, the security may be released to the operator of the Solar Energy System.

Financial responsibility for decommissioning would be an obligation of the owner of the Project. There are several options to consider, but the preferred method would be for a specific amount of funding (the "Decommissioning Fund") to be set aside by the end of Year 25 in an amount equal to the estimated cost of decommissioning (the "Decommissioning Cost"), less the salvage value for equipment to be decommissioned and the sales proceeds from sale of the property once decommissioning is complete. Ideally, the cost of decommissioning should equal the amount of money gained from the scrap value and land value of the Project. If additional funds are needed, they would be provided by the owner of the Project and deposited into a dedicated account. Funds would be provided in an amount that would enable the sum of the Decommissioning Fund, salvage value, and land sales proceeds to cover the cost of decommissioning.

1.8 Water Usage

The following is an estimate of the amount of water that would be needed for the Project during construction and site preparation, ongoing panel washing, and decommissioning and dismantling activities. The Project would not use groundwater. Water for construction and maintenance would be obtained from the Borrego Water District (BWD).

1.8.1 Construction and Application of Soil Binding Agents

During construction, the Project would use water to suppress fugitive dust during grubbing, clearing, grading, trenching, and soil compaction, and to apply a non-toxic soil binding agent for soil stabilization during construction.

For site preparation and grading, it is assumed that approximately 0.16 acre-feet (52,400 gallons) of water per acre would be used during the first two months, or 40 work days, of site construction. For fugitive dust control, it is estimated that approximately 0.01 acre-feet (3,300 gallons) of water per acre would be used for the application of the soil-binding agent during construction. Water would not be used for concrete hydration because the concrete is expected to be delivered to the site already hydrated. A 30 percent contingency has been added to the calculation. In total, the Project would require approximately 14.86 acre-feet (4,843,505 gallons) of water during construction. Less water-intensive methods of dust suppression are under review, including use of soil stabilizers, tightly phasing construction activities, staging grading and other dust-creating activities, and/or compressing the entire construction schedule to reduce the

time period over which dust-suppression measures would be required. Table 1-2 summarizes construction water usage.

Table 1-2
Total Estimated Water for Temporary Project Construction

Activity	Time Frame (work days)[1]	Water Use (gallons)	Acres	Total Estimated Water Demand (gallons)	Total Estimated Water Demand (acre-feet)[4]
Site Preparation[2] (clearing, grading)	40	52,400	66.89	3,505,036	10.76
Application of Water/Soil Binding Agent[3]	156	3,300	66.89	220,737	0.63
Concrete Hydration	--	NA	--	NA	NA
30% Contingency	--	--	--	1,117,732	3.43
Total Construction Water	**--**	**--**	**--**	**4,843,505**	**14.86**

1 Assumes 20 work days per month.

2 Assumes 52,400 gallons of water per acre (gal/ac) would be used for site preparation (4,000 gal/ac for brushing and clearing and 48,400 gal/ac for grading). Total acreage includes all options for access, water line, and Gen-tie line routes.

3 Assumes 3,300 gal/acre would be used for application of soil binding agent. Total acreage includes all options for access, water line, and Gen-tie line routes.

4 One acre-foot = 325,851 gallons

1.8.2 Ongoing Panel Washing and Soil Stabilization

Water would be used for operational purposes for cleaning the solar modules and for reapplication of the non-toxic permeable soils stabilizers as follows:

Solar Module Washing: It is anticipated that in-place panel washing would occur every six weeks or nine times/year by mobile crews who would also be available for dispatch whenever onsite repairs or other maintenance are required. Panel washing would be undertaken using a tanker truck and smaller “satellite” panel washing trucks. Each panel washing truck would carry water treatment equipment and truck-mounted panel washing booms. Water would be treated to ensure a hardness level of seven or less and to remove impurities. Wastewater not used for panel washing would be captured and disposed of offsite. As a conservative (i.e., high) estimate, approximately 24 gallons of water would be required to wash each set of tracker modules, thus requiring approximately 7,392 gallons or 0.02 acre-feet of water per wash. The trackers would be washed approximately nine times per year. The amount of water needed to wash the trackers would total an estimated 66,528 gallons or 0.20 acre-feet/year.

Soil Binding Agent Application: It is anticipated that the soil stabilizer chosen for the Project would need to be reapplied bi-annually. The Project would utilize a soil binding stabilization agent that is non-toxic and permeable. The purpose of the soil stabilizer is to prevent erosion and to reduce fugitive dust. To reapply the soil stabilizer agent would require approximately 3,300 gallons of water per acre. The Project area that would require soil stabilization is approximately 66.89 acres. Therefore, the total amount of water needed to reapply the soil stabilization agent is 220,737 gallons/year. Table 1-3 summarizes the operational water usage for the Project.

Table 1-3
Total Estimated Water Use for Project Operation/Year

Dust Suppression *(if required)*	
Number of gallons/acre[1]	3,300
Acres[2]	66.89
Water use/year (gallons)	220,737
Water use/year (acre-feet[3])	0.68
Panel Washing	
Washes/year	9
Number of trackers	308
Gallons/tracker/wash (maximum)	24
Total water use/year (gallons)	66,528
Total water use/year (acre-feet)	0.2
Total Potable Water Usage	
Water use (gallons/year)	**287,265**
30% Contingency	**86,180**
Total water use (gallons/year) w/ 30% Contingency	**373,445**
Total water use (acre-feet) w/30% Contingency	**1.15**

1 Based on suppression activities of 3,300 gallons every year.
2 Based on constructed acres within the Project site and for Project access. Open space areas are not included in estimates for dust suppression.
3 1 acre-foot = 325,851 gallons

1.8.3 Decommissioning and Dismantling

It is anticipated that the amount of water (4,843,505 gallons or 14.86 acre-feet) used for construction above in Section 1.8.1 would be the equivalent amount of water needed to decommission and dismantle the Project.

1.8.4 Annual Project Water Usage (30 year period)

The Project's total water usage including construction activities (4,843,505 gallons or 14.86 acre-feet); ongoing maintenance and Project operation for 30 years (373,445

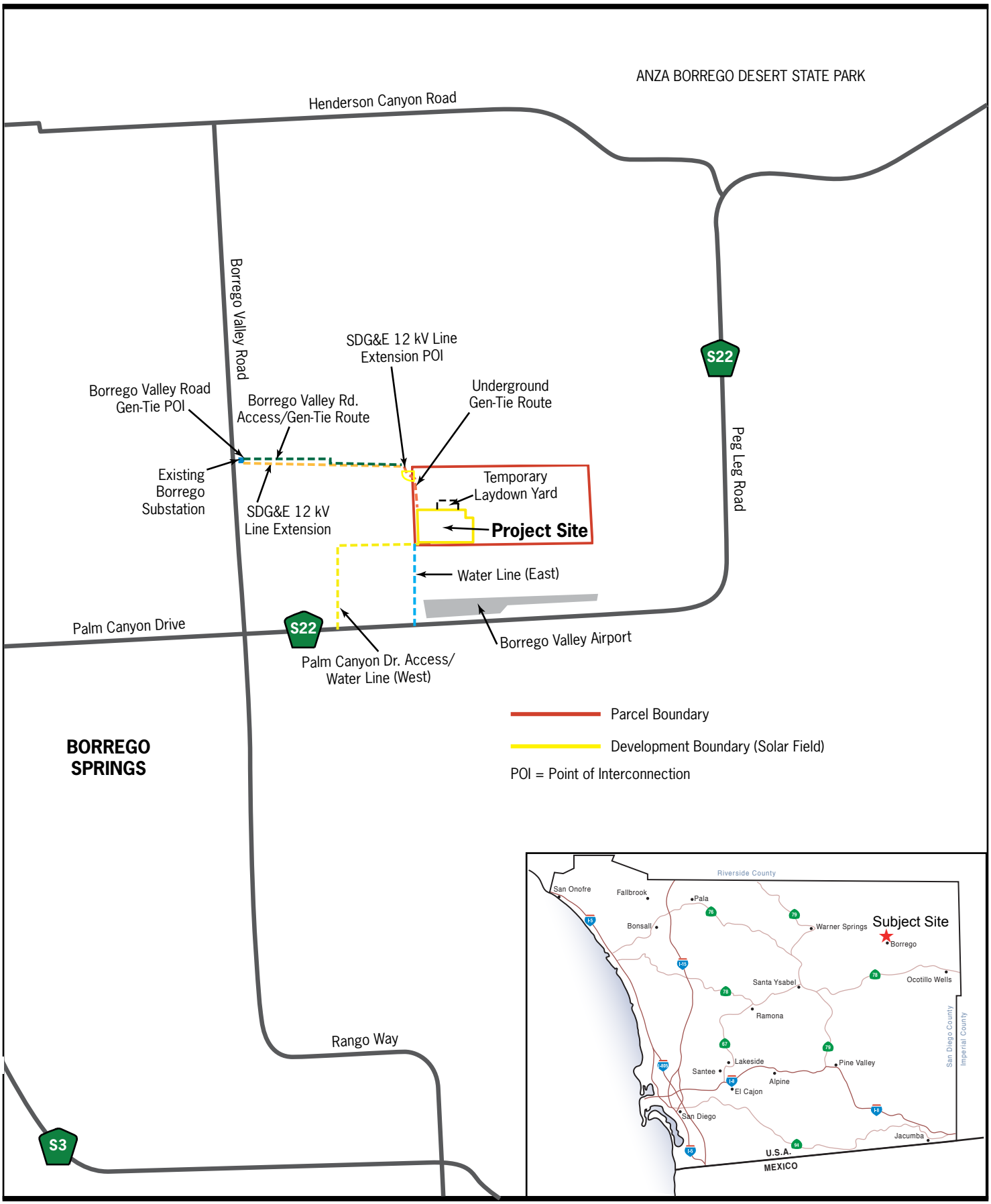
gallons or 1.15 acre-feet times 30 years = 11,203,350 gallons or 34.38 acre-feet); and, 4,843,505 gallons, or 14.86 acre-feet, for decommissioning and dismantling totals 20,890,360 gallons or 64.11 acre-feet. This results in an annual water use of approximately 2.14 acre-feet per year over a 30-year period (64.11 acre-feet / 30 years = 2.14 acre feet/year).

1.9 Matrix of Project Approvals/Permits

This section includes a table (Table 1-4) of all approvals/permits that are expected to be obtained during the decision-making process. Table 1-4 is organized by agency/jurisdiction. In the case where multiple approvals are necessary from a single agency, the approvals are listed in the order they are believed to occur.

Table 1-4
Approvals/Permits Expected to be Obtained

Government Agency	Action/Permit
County of San Diego	• MUP – Compliance with Sections 1350, 2705, and 2926 of the County Zoning Ordinance • Compliance Finding - Resource Protection Ordinance • Plot Plans – Compliance with the County's Form #90 • Preliminary Grading Plan - Compliance with County grading limitations • Utilizing the previously-adopted Mitigated Negative Declaration (MND), 15162 findings • Grading Permit - Department of Public Works • Improvement Plans and Permits - Department of Public Works
State of California Water Resources Control Board	N/A



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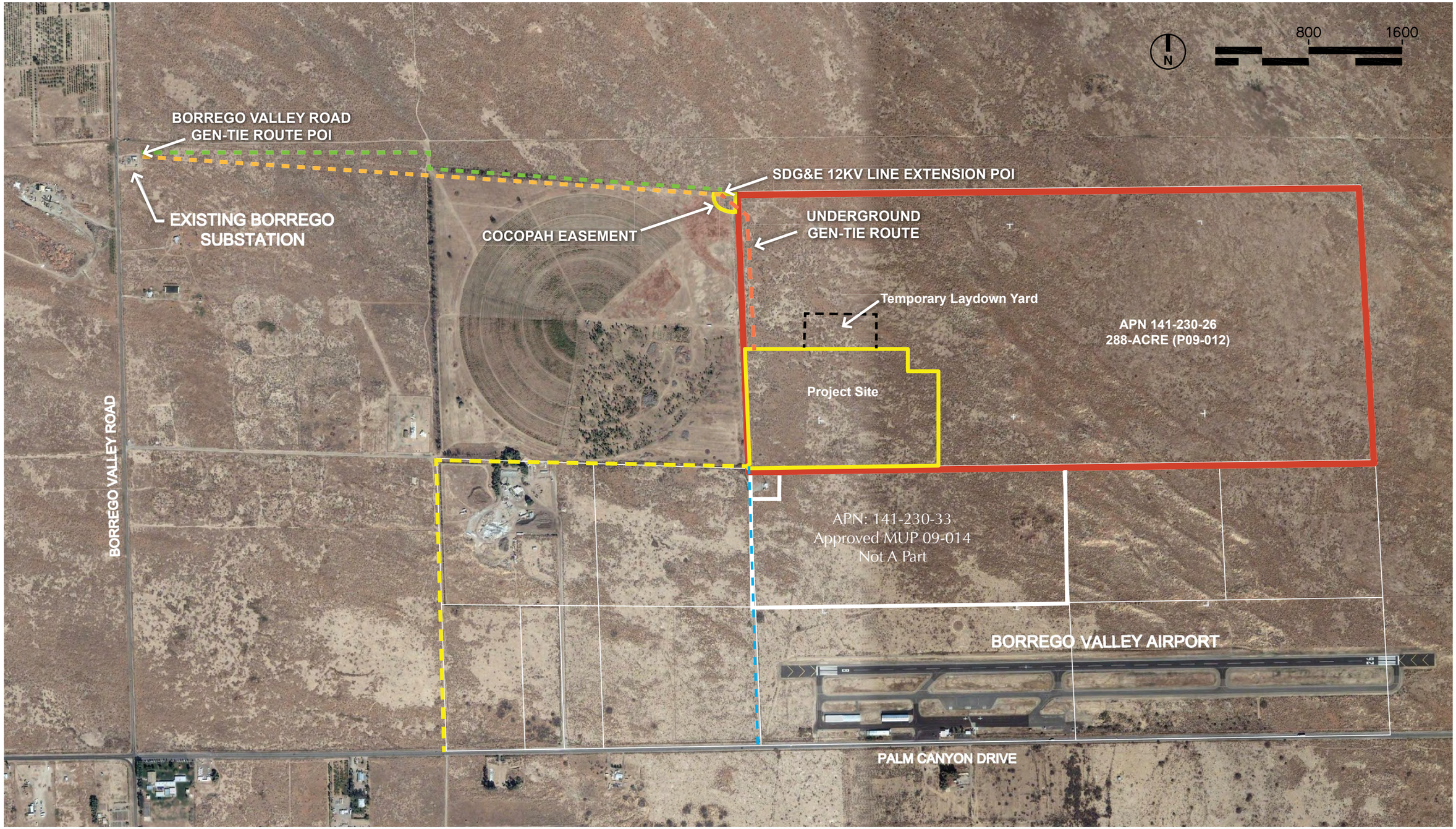
N

Not to Scale

Regional / Local Vicinity Map

Desert Green Solar Farm

Figure 1



Source: Eagle Aerial, 2008.

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- Parcel Boundary
- Development Boundary (Solar Field)
- Borrego Valley Road Access/Gen-Tie Route
- SDG&E 12kV Line Extension to Existing Borrego Substation
- Underground Gen-Tie Route
- Temporary Laydown Yard
- Palm Canyon Drive Access Route/West Water Line
- East Water Line
- POI = Point of Interconnection

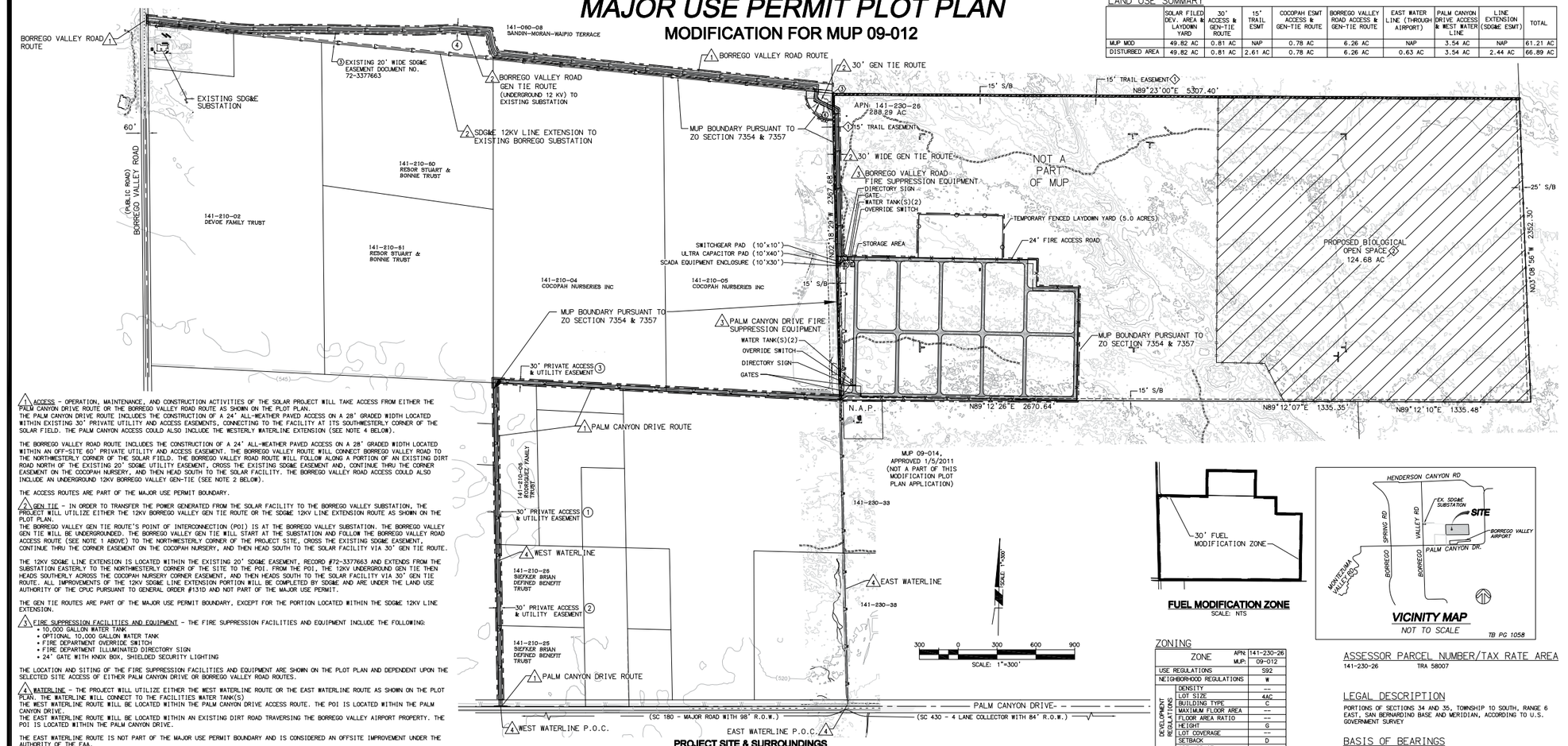
Aerial Photograph

Desert Green Solar Farm

Figure 2

MAJOR USE PERMIT PLOT PLAN

MODIFICATION FOR MUP 09-012



PROJECT SITE & SURROUNDINGS
SCALE: 1"=300'

1 ACCESS - OPERATION, MAINTENANCE, AND CONSTRUCTION ACTIVITIES OF THE SOLAR PROJECT WILL TAKE ACCESS FROM EITHER THE PALM CANYON DRIVE ROUTE OR THE BORREGO VALLEY ROAD ROUTE AS SHOWN ON THE PLOT PLAN.
THE PALM CANYON DRIVE ROUTE INCLUDES THE CONSTRUCTION OF A 24' ALL-WEATHER PAVED ACCESS ON A 28' GRADED WIDTH LOCATED WITHIN EXISTING 30' PRIVATE UTILITY AND ACCESS EASEMENTS, CONNECTING TO THE FACILITY AT ITS SOUTHWESTERLY CORNER OF THE SOLAR FIELD. THE PALM CANYON ACCESS COULD ALSO INCLUDE THE WESTERLY WATERLINE EXTENSION (SEE NOTE 4 BELOW).

THE BORREGO VALLEY ROAD ROUTE INCLUDES THE CONSTRUCTION OF A 24' ALL-WEATHER PAVED ACCESS ON A 28' GRADED WIDTH LOCATED WITHIN AN OFF-SITE 60' PRIVATE UTILITY AND ACCESS EASEMENT. THE BORREGO VALLEY ROUTE WILL CONNECT BORREGO VALLEY ROAD TO THE NORTHWESTERLY CORNER OF THE SOLAR FIELD. THE BORREGO VALLEY ROAD ROUTE WILL FOLLOW ALONG A PORTION OF AN EXISTING DIRT ROAD NORTH OF THE EXISTING 20' SDG&E UTILITY EASEMENT, CROSS THE EXISTING SDG&E EASEMENT AND, CONTINUE THRU THE CORNER EASEMENT ON THE COCOPAH NURSERY, AND THEN HEAD SOUTH TO THE SOLAR FACILITY. THE BORREGO VALLEY ROAD ACCESS COULD ALSO INCLUDE AN UNDERGROUND 12KV BORREGO VALLEY GEN-TIE (SEE NOTE 2 BELOW).

THE ACCESS ROUTES ARE PART OF THE MAJOR USE PERMIT BOUNDARY.

2 GEN TIE - IN ORDER TO TRANSFER THE POWER GENERATED FROM THE SOLAR FACILITY TO THE BORREGO VALLEY SUBSTATION, THE PROJECT WILL UTILIZE EITHER THE 12KV BORREGO VALLEY GEN TIE ROUTE OR THE SDG&E 12KV LINE EXTENSION ROUTE AS SHOWN ON THE PLOT PLAN.
THE BORREGO VALLEY GEN TIE ROUTE'S POINT OF INTERCONNECTION (POI) IS AT THE BORREGO VALLEY SUBSTATION. THE BORREGO VALLEY GEN TIE WILL BE UNDERGROUNDED. THE BORREGO VALLEY GEN TIE WILL START AT THE SUBSTATION AND FOLLOW THE BORREGO VALLEY ROAD ACCESS ROUTE (SEE NOTE 1 ABOVE) TO THE NORTHWESTERLY CORNER OF THE PROJECT SITE, CROSS THE EXISTING SDG&E EASEMENT, CONTINUE THRU THE CORNER EASEMENT ON THE COCOPAH NURSERY, AND THEN HEAD SOUTH TO THE SOLAR FACILITY VIA 30' GEN TIE ROUTE.

THE 12KV SDG&E LINE EXTENSION IS LOCATED WITHIN THE EXISTING 20' SDG&E EASEMENT, RECORD #72-3377663 AND EXTENDS FROM THE SUBSTATION EASTERLY TO THE NORTHWESTERLY CORNER OF THE SITE TO THE POI. FROM THE POI, THE 12KV UNDERGROUND GEN TIE THEN HEADS SOUTHERLY ACROSS THE COCOPAH NURSERY CORNER EASEMENT, AND THEN HEADS SOUTH TO THE SOLAR FACILITY VIA 30' GEN TIE ROUTE. ALL IMPROVEMENTS OF THE 12KV SDG&E LINE EXTENSION PORTION WILL BE COMPLETED BY SDG&E AND ARE UNDER THE LAND USE AUTHORITY OF THE CPUC PURSUANT TO GENERAL ORDER #131D AND NOT PART OF THE MAJOR USE PERMIT.

THE GEN TIE ROUTES ARE PART OF THE MAJOR USE PERMIT BOUNDARY, EXCEPT FOR THE PORTION LOCATED WITHIN THE SDG&E 12KV LINE EXTENSION.

3 FIRE SUPPRESSION FACILITIES AND EQUIPMENT - THE FIRE SUPPRESSION FACILITIES AND EQUIPMENT INCLUDE THE FOLLOWING:
- 10,000 GALLON WATER TANK
- OPTIONAL 10,000 GALLON WATER TANK
- FIRE DEPARTMENT OVERRIDE SWITCH
- FIRE DEPARTMENT ILLUMINATED DIRECTORY SIGN
- 24' GATE WITH KNOX BOX, SHIELDED SECURITY LIGHTING

THE LOCATION AND SITING OF THE FIRE SUPPRESSION FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLOT PLAN AND DEPENDENT UPON THE SELECTED SITE ACCESS OF EITHER PALM CANYON DRIVE OR BORREGO VALLEY ROAD ROUTES.

4 WATERLINE - THE PROJECT WILL UTILIZE EITHER THE WEST WATERLINE ROUTE OR THE EAST WATERLINE ROUTE AS SHOWN ON THE PLOT PLAN. THE WATERLINE WILL CONNECT TO THE FACILITIES WATER TANK(S).
THE WEST WATERLINE ROUTE WILL BE LOCATED WITHIN THE PALM CANYON DRIVE ACCESS ROUTE. THE POI IS LOCATED WITHIN THE PALM CANYON DRIVE.
THE EAST WATERLINE ROUTE WILL BE LOCATED WITHIN AN EXISTING DIRT ROAD TRAVERSING THE BORREGO VALLEY AIRPORT PROPERTY. THE POI IS LOCATED WITHIN THE PALM CANYON DRIVE.

THE EAST WATERLINE ROUTE IS NOT PART OF THE MAJOR USE PERMIT BOUNDARY AND IS CONSIDERED AN OFFSITE IMPROVEMENT UNDER THE AUTHORITY OF THE FAA.

NOTES

1. GROSS AREA: 288.29 ACRES (APN 141-230-26)
2. NET AREA: 288.29 ACRES (APN 141-230-26)
3. TOPOGRAPHIC SOURCE: VERTICAL MAPPING, FLOWN 5/8/09 & & INTERMAP FLOWN 2005
4. ASSOCIATED REQUESTS: NONE
5. THE APPROVAL OF THIS MAJOR USE PERMIT MODIFICATION (MUP) AUTHORIZES THE FOLLOWING: CONSTRUCTION, OPERATION, AND MAINTENANCE OF A CPV SOLAR FARM PURSUIT TO SECTION 6952 OF THE SAN DIEGO COUNTY ZONING ORDINANCE.
6. 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 PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY.
7. ALL STRUCTURES TO BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIALS (CONCRETE, BLOCK, METAL) OR SIMILAR.
8. NO LANDSCAPING PROPOSED.
9. LIGHTING FOR MAINTENANCE AND SECURITY PROPOSES ONLY. SHIELDED LIGHTING LOCATED AT GATES AND SHALL CONFORM TO COUNTY OF SAN DIEGO OUTDOOR LIGHTING REQUIREMENTS. SEE DETAIL ON SHEET 3.
10. PHASING - PROJECT WILL BE IMPLEMENTED IN SEVERAL PHASES WITHOUT REGARD TO SEQUENCE WITHIN DEVELOPMENT AREA.
11. ALL DISTURBED AREAS WOULD BE COVERED WITH GRAVEL OR A BINDING AGENT TO REDUCE DUST.
12. SEE PRELIMINARY GRADING PLAN FOR PROPOSED GRADING.
13. ONLY DIRECTIONAL, LIMITS OF OPEN SPACE AND SAFETY SIGNAGE ARE PROPOSED.
14. NO DEVELOPMENT WILL OCCUR IN THE AREAS IDENTIFIED ON THE PLOT PLAN AS "OPEN SPACE".
15. SEE SHEET 2 FOR LEGEND.
16. THE ENTIRE SITE IS SUBJECT TO INUNDATION BY THE 100-YEAR FLOOD AND IS WITHIN FEMA MAP NO. 06073C0675F. THE LIMITS OF THE 100-YEAR FLOOD ALONG THE WATERCOURSE WHICH FLOWS THROUGH THE PROPERTY.
17. SITE ACCESS GATE(S) TO BE EQUIPPED WITH FIRE DEPARTMENT APPROVED KNOX KEY-OPERATED SWITCH.
18. SOLAR RELATED FACILITIES (PANELS, ELECTRICAL CONNECTIONS, TRANSFORMER/ INVERTER PLATFORM, STORAGE BUILDING, EMERGENCY GENERATOR, FENCING, INTERNAL ACCESS AND SWITCHGEAR PLATFORM, ETC.) SHOWN ON THE PLOT PLAN MAY BE RELOCATED, RECONFIGURED, AND/OR RESIZED WITHIN THE SOLAR FACILITY DEVELOPMENT AREA (EXCLUSIVE OF THE OPEN SPACE AREAS) WITH THE ADMINISTRATIVE APPROVAL OF THE DIRECTOR OF PDS WHEN FOUND IN CONFORMANCE WITH THE INTENT AND CONDITIONS OF PERMIT'S APPROVAL. TRANSFORMER/INVERTER/GENERATOR SIZE, LOCATIONS, BRAND, ELECTRICAL SIZE CAN BE RELOCATED, REPLACED OR RECONFIGURED WITHOUT REQUIREMENT OF MINOR DEVIATION. THE TRANSFORMER/INVERTER/GENERATOR MUST COMPLY WITH NOISE ORDINANCE AND MUST BE ELEVATED 1' ABOVE BASE FLOOD ELEVATION. THE 24' WIDE FIRE ACCESS ROAD WIDTHS MAY BE REDUCED ADMINISTRATELY WITH THE APPROVAL OF THE COUNTY FIRE AUTHORITY AND THE BORREGO SPRINGS FIRE PROTECTION DISTRICT.
19. THE ENTIRETY OF THE PARCEL ENCUMBERED BY MUP 09-012 (APN 141-230-26-00) IS SUBJECT TO THE RESTRICTIONS AND TERMS OF A COUNTY AVIATION EASEMENT.
20. TOTAL SOLAR TRACKER HEIGHT WILL NOT EXCEED 30 FEET.
21. WATER DISTRICT: BORREGO WATER DISTRICT.
22. ALL STRUCTURES, TRANSFORMER/INVERTER PLATFORM AND ELECTRICAL PADS TO BE ON PIERS.
23. 10,000 GAL. WATER TANK(S) WITH FIRE DEPARTMENT CONNECTION.
24. NO DEVELOPMENT IS ALLOWED WITHIN THE NOT A PART AREA WITHOUT A SUBSEQUENT PERMIT AND/OR DISCRETIONARY REVIEW.
25. PROVIDE OVERRIDE SWITCH CONTROL NEAR MAIN ENTRY TO ALLOW FIRE DEPARTMENT TO MOVE TRACKERS INTO STOW POSITION.
26. TRAIL EASEMENT TO ALLOW UTILITY LINES UNDERGROUND.

LAND USE SUMMARY

	SOLAR FILED DEV. AREA & LAYDOWN YARD	30' ACCESS & GEN-TIE ROUTE	15' TRAIL ESMT	COCOPAH ESMT ACCESS & GEN-TIE ROUTE	BORREGO VALLEY ROAD ACCESS & GEN-TIE ROUTE	EAST WATER LINE (THROUGH AIRPORT)	PALM CANYON DRIVE ACCESS & WEST WATER LINE	LINE EXTENSION (SDG&E ESMT)	TOTAL
MUP MOD	49.82 AC	0.81 AC	NAP	0.78 AC	6.26 AC	NAP	3.54 AC	NAP	61.21 AC
DISTURBED AREA	49.82 AC	0.81 AC	2.61 AC	0.78 AC	6.26 AC	0.63 AC	3.54 AC	2.44 AC	66.89 AC

PROPOSED EASEMENTS

	DESCRIPTION
1	15' TRAIL EASEMENT
2	OPEN BIOLOGICAL SPACE EASEMENT (SHT. 1)

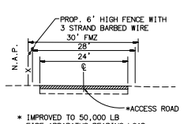
EXISTING EASEMENTS*

	DESCRIPTION	DISPOSITION
1	SDG&E EASEMENT	TO REMAIN
2	ACCESS & UTILITY EASEMENT (200' RADIUS)	TO REMAIN

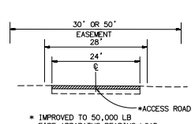
○ BASED ON DATA FROM PRELIMINARY TITLE REPORT BY FIDELITY NATIONAL TITLE COMPANY, ORDER NO. 11-725137943-D-PP, DATED MAY 16, 2012.

RECORDED EASEMENTS

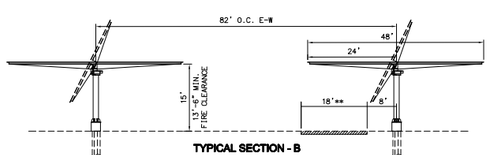
	DESCRIPTION
1	30' PRIVATE ACCESS & UTILITY EASEMENT 2012-0235574
2	30' PRIVATE ACCESS & UTILITY EASEMENT 2012-235573
3	30' PRIVATE ACCESS & UTILITY EASEMENT 2012-0282029
4	50' PRIVATE ACCESS & UTILITY EASEMENT



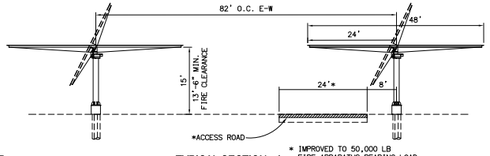
TYPICAL SECTION
24' PERIMETER ACCESS ROAD
NOT TO SCALE
TYPICAL LOCATION UNLESS SHOWN OTHERWISE ON SITE PLAN



TYPICAL SECTION
(PALM CANYON / BORREGO VALLEY ROAD)
PRIMARY ACCESS ROAD / EASEMENT
NOT TO SCALE



TYPICAL SECTION - B
18' SERVICE ROAD
NOT TO SCALE
** IMPROVE TO 15,000 LB SERVICE ROAD



TYPICAL SECTION - A
24' INTERIOR ACCESS ROAD (FIRE)
NOT TO SCALE
* IMPROVED TO 50,000 LB FIRE APPARATUS BEARING LOAD

FUEL MODIFICATION ZONE
SCALE: NTS

ZONING

ZONE	APN: MUP:	141-230-26 09-012
USE REGULATIONS		S92
NEIGHBORHOOD REGULATIONS		W
DEVELOPMENT REGULATIONS: DENSITY		---
DEVELOPMENT REGULATIONS: LOT SIZE		4AC
DEVELOPMENT REGULATIONS: BUILDING TYPE		C
DEVELOPMENT REGULATIONS: MAXIMUM FLOOR AREA		---
DEVELOPMENT REGULATIONS: FLOOR AREA RATIO		---
DEVELOPMENT REGULATIONS: HEIGHT		G
DEVELOPMENT REGULATIONS: LOT COVERAGE		---
DEVELOPMENT REGULATIONS: SETBACK		D
DEVELOPMENT REGULATIONS: OPEN SPACE		---
SPECIAL AREA REGULATIONS		C

VICINITY MAP
NOT TO SCALE
TB PG 1058

ASSESSOR PARCEL NUMBER/TAX RATE AREA

141-230-26 TRA 58007

LEGAL DESCRIPTION

PORTIONS OF SECTIONS 34 AND 35, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDING BASE AND MERIDIAN, ACCORDING TO U.S. GOVERNMENT SURVEY

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM (NAD83) ZONE 6,AS DETERMINED BY THE LINE BETWEEN NATIONAL GEODETIC SURVEY (NGS) STATIONS "13 AR ECC" AND "BOR 12" WITH A BEARING OF N42°35'10"W.

BENCHMARK

NGS STATION BOR 9, A 4" BRASS DISK IN 6" CONCRETE BASE 4.5' SOUTHEAST OF POWER POLE #319 AND 30' NORTHEAST OF THE EDGE OF BORREGO VALLEY

ROAD. ELEVATION = 521.86 DATUM: NAVD88

APPLICANT

DESERT GREEN SOLAR FARM LLC
c/o CLARK CRAWFORD,
ATTORNEY-IN-FACT
16650 VIA ESPRILLO
SAN DIEGO, CA 92127
CONTACT: PATRICK BROWN
(619) 733-2649

SHEET INDEX

DESERT GREEN SOLAR FARM
BORREGO SPRINGS, CA

MODIFICATION FOR MUP 09-012
(NO CHANGE TO MUP 09-014)
ER NO. 09-05-001A
TITLE SHEET

FEBRUARY 22, 2013
SHEET 1 OF 3

RBF CONSULTING

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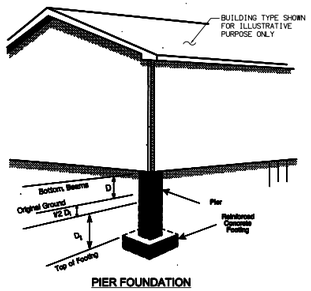
Major Use Permit Plot Plan

Desert Green Solar Farm

Figure 3A

MAJOR USE PERMIT PLOT PLAN

MODIFICATION FOR MUP 09-012



PIER FOUNDATION

Depth of Erosion Protection

Footings for slab foundations must be constructed to a depth below the prevailing ground level as shown in Figure II-1,Sht. 1 The necessary depth of construction for these footings is based on the Borrego Valley Alluvial Fan Map.

The flood depth (D) shown for the particular location is converted to a construction depth (D_1) based on the velocity shown on the map, using the following table:

Velocity (V)	Construction Depth (D_1)
4 Feet/Second	D_1 = D
6 Feet/Second	D_1 = D
8 Feet/Second	D_1 = 1.0 X D
Over 8 Feet/Second	Study Required

Where: D_1 = Depth Below Ground (Feet)
D = Depth Shown on Alluvial Fan Map (Feet)
V = Velocity Shown on Alluvial Fan Map (Feet/Second)

Erosion protection made of rock, gabions, or rip-rap must be installed to the depth D_1.

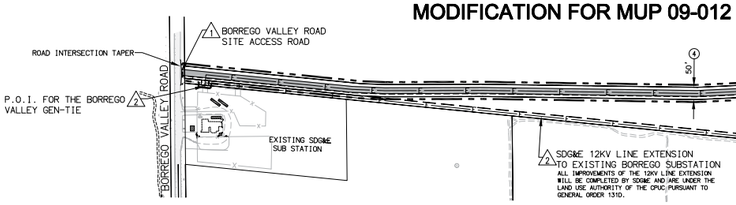
D_1 Pier Scour
Depth of Scour (feet)

Velocity (fps)	Vertical Member Diameter (inches)				
	4	6	8	10	12
1	.70	1.05	1.25	1.50	1.75
2	1.05	1.25	1.50	1.75	2.00
4	1.25	1.75	2.00	2.25	2.75
6	1.75	2.00	2.50	2.75	3.25
8	2.00	2.25	2.75	3.25	3.75
10	2.25	2.50	3.00	3.50	4.00
12	2.50	3.00	3.50	4.00	4.50

TYPICAL SECTION
FOUNDATION FOOTING OPTIONS
TRANSFORMER / INVERTER PLATFORM
STORAGE, CABINETS, O&M STRUCTURE
N.T.S.

SOURCE: BORREGO VALLEY FLOOD MANAGEMENT REPORT DATED OCT. 1989

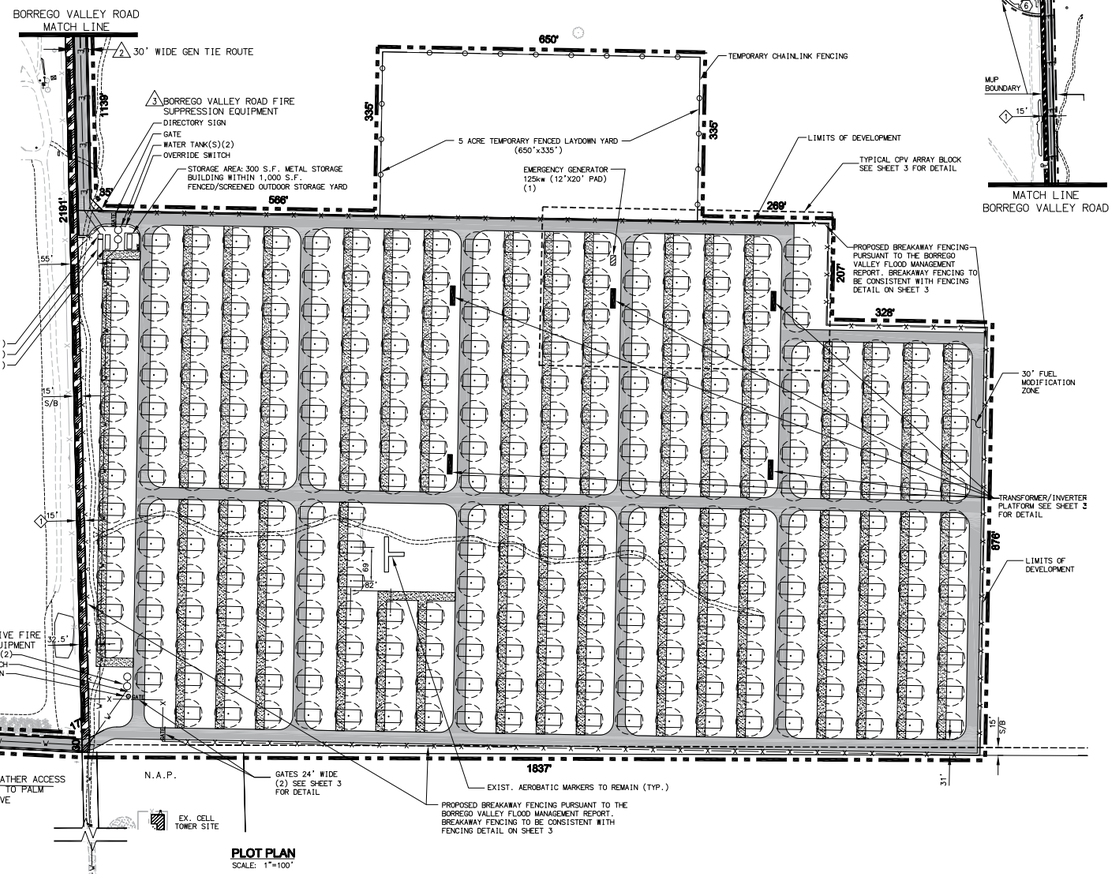
NOTE: A PIER FOUNDATION DESIGN IS SELECTED TO RAISE THE BUILDINGS SO THEY ARE AT LEAST 1' ABOVE THE BASE FLOOD ELEVATION, THEN A CLOMR/LOMR PROCESS IS NOT NEEDED.



BORREGO VALLEY ROAD
PLOT PLAN
SCALE: 1"=200'

LEGEND:

- MAJOR USE PERMIT BOUNDARY
- TAX ASSESSOR BOUNDARY
- LIMITED BUILDING ZONE LINE
- EX. 6' CHAINLINK FENCE
- PROP. 6' CHAINLINK BREAKAWAY FENCE WITH 3 STRAND BARBED WIRE
- TEMPORARY FENCING
- PROP. 24' FIRE ACCESS ROAD-ALL WEATHER (10% GRADIENT MAX) 50,000 LB.
- PROP. 18' SERVICE ROAD 15,000 LB.
- PROP. TRAIL EASEMENT ◇
- BUILDING SETBACK LINE (S/B)
- PROP. WATER LINE
- PROP. UNDERGROUND POWER LINE
- TRANSFORMER/INVERTER PLATFORM (4 - DUAL 630kw & 1 - DUAL 720kw INVERTER PLATFORM)
- EMERGENCY GENERATOR PLATFORM
- CPV ARRAY (308)
- PROP. BIOLOGICAL OPEN ◇ SPACE (124.68 AC.) WITH OPEN SPACE SIGNAGE SEE DETAIL ON SHEET 3



PLOT PLAN
SCALE: 1"=100'

PALM CANYON DRIVE
PALM CANYON DRIVE
PLOT PLAN
SCALE: 1"=200'

PROJECT STRUCTURES COVERAGE TABLE

ITEM DESCRIPTION	AREA	UNIT	QUANTITY	TOTAL AREA	UNIT
INVERTER PLATFORM (10'X40')	400	SF	5	2,000	SF
STORAGE STRUCTURE (10'X30')	300	SF	1	300	SF
10,000 GAL. WATER TANK	177	SF	2	354	SF
EMERGENCY GENERATOR (12'X20')	240	SF	1	240	SF
SWITCHGEAR PAD (10'X10')	100	SF	1	100	SF
ULTRA CAPACITOR PAD (10'X40')	400	SF	1	400	SF
SCADA EQUIPMENT (10'X30')	300	SF	1	300	SF
			SUB TOTAL	3,694	SF
			EQUIV=	0.08	AC
SOLAR PANEL (25'X48')	1,200	SF	308	8.48	AC
			TOTAL	8.56	AC
			3.0% OF PARCEL COVERAGE		

PROPOSED EASEMENTS

	DESCRIPTION
◇	15' TRAIL EASEMENT
◇	OPEN BIOLOGICAL SPACE EASEMENT (SHT. 1)

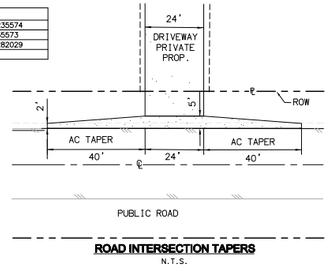
EXISTING EASEMENTS*

	DESCRIPTION	DISPOSITION
①	SDG&E EASEMENT	TO REMAIN
②	ACCESS & UTILITY EASEMENT (200' RADIUS)	TO REMAIN

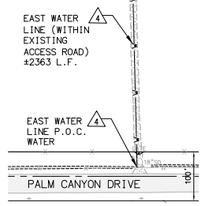
○ BASED ON DATA FROM PRELIMINARY TITLE REPORT BY FIDELITY NATIONAL TITLE COMPANY, ORDER NO. 11-725137943-D-PP, DATED MAY 16, 2012.

RECORDED EASEMENTS

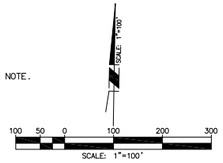
	DESCRIPTION
①	30' PRIVATE ACCESS & UTILITY EASEMENT 2012-0235574
②	30' PRIVATE ACCESS & UTILITY EASEMENT 2012-235573
③	30' PRIVATE ACCESS & UTILITY EASEMENT 2012-0282029
④	50' PRIVATE ACCESS & UTILITY EASEMENT



ROAD INTERSECTION TAPERS
N.T.S.



1 ACCESS - SEE SHEET 1 FOR NOTE.
2 GEN TIE - SEE SHEET 1 FOR NOTE.
3 FIRE SUPPRESSION FACILITIES AND EQUIPMENT - SEE SHEET 1 FOR NOTE.
4 WATERLINE - SEE SHEET 1 FOR NOTE.



DESERT GREEN SOLAR FARM
BORREGO SPRINGS, CA
MODIFICATION FOR MUP 09-012
(NO CHANGE TO MUP 09-014)
ER NO. 09-05-001A
PLOT PLAN
FEBRUARY 22, 2013
SHEET 2 OF 3

RBF CONSULTING

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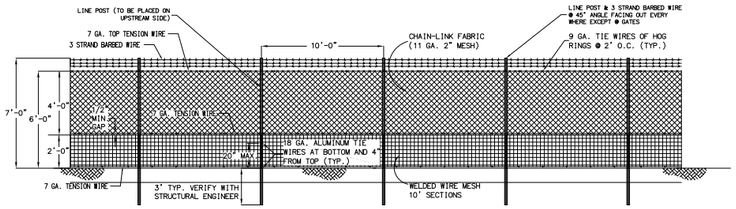
Major Use Permit Plot Plan

Desert Green Solar Farm

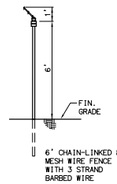
Figure 3B

MAJOR USE PERMIT PLOT PLAN

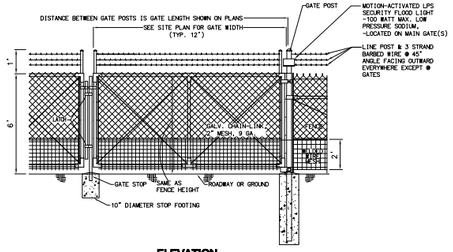
MODIFICATION FOR MUP 09-012



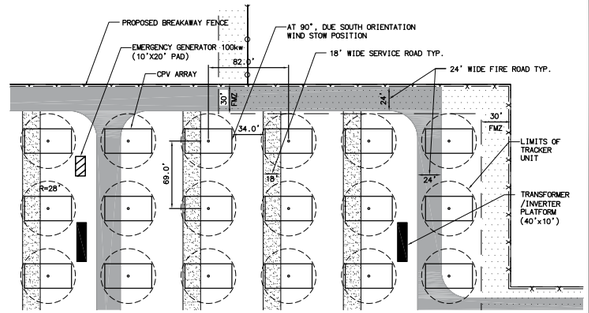
ELEVATION
BREAKAWAY FENCING DETAIL
N.T.S.



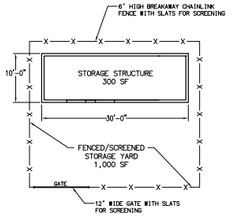
SECTION
TYPICAL FENCE
N.T.S.



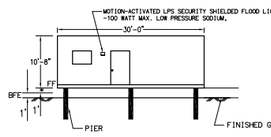
ELEVATION
HALF / DOUBLE DRIVE GATE
N.T.S.



PLAN VIEW
TYPICAL CPV ARRAY BLOCK LAYOUT
N.T.S.

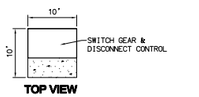


FLOOR PLAN
STORAGE STRUCTURE
N.T.S.

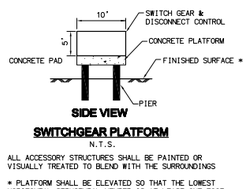


ELEVATION
STORAGE STRUCTURE
N.T.S.

- * FINISH FLOOR SHALL BE ELEVATED AT LEAST ONE FOOT ABOVE THE ANTICIPATED INUNDATION DEPTH ESTABLISHED WITHIN THE HYDROLOGY AND HYDRAULIC BASIS OF DESIGN STUDY.



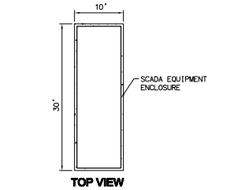
TOP VIEW



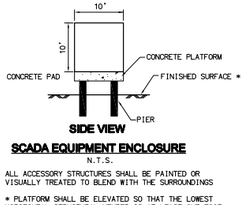
SIDE VIEW

SWITCHGEAR PLATFORM
N.T.S.

- ALL ACCESSORY STRUCTURES SHALL BE PAINTED OR VISUALLY TREATED TO BLEND WITH THE SURROUNDINGS
- * PLATFORM SHALL BE ELEVATED SO THAT THE LOWEST HORIZONTAL STRUCTURAL MEMBER IS AT LEAST ONE FOOT ABOVE THE ANTICIPATED INUNDATION DEPTH ESTABLISHED WITHIN THE HYDROLOGY AND HYDRAULIC BASIS OF DESIGN STUDY.



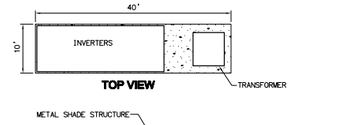
TOP VIEW



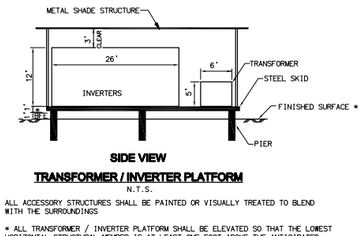
SIDE VIEW

SCADA EQUIPMENT ENCLOSURE
N.T.S.

- ALL ACCESSORY STRUCTURES SHALL BE PAINTED OR VISUALLY TREATED TO BLEND WITH THE SURROUNDINGS
- * PLATFORM SHALL BE ELEVATED SO THAT THE LOWEST HORIZONTAL STRUCTURAL MEMBER IS AT LEAST ONE FOOT ABOVE THE ANTICIPATED INUNDATION DEPTH ESTABLISHED WITHIN THE HYDROLOGY AND HYDRAULIC BASIS OF DESIGN STUDY.



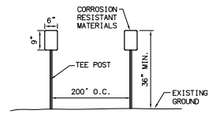
TOP VIEW



SIDE VIEW

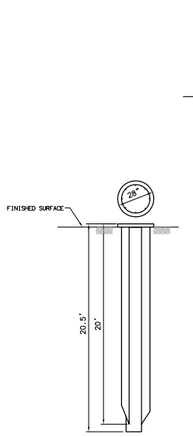
TRANSFORMER / INVERTER PLATFORM
N.T.S.

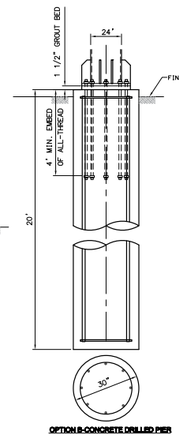
- ALL ACCESSORY STRUCTURES SHALL BE PAINTED OR VISUALLY TREATED TO BLEND WITH THE SURROUNDINGS
- * ALL TRANSFORMER / INVERTER PLATFORM SHALL BE ELEVATED SO THAT THE LOWEST HORIZONTAL STRUCTURAL MEMBER IS AT LEAST ONE FOOT ABOVE THE ANTICIPATED INUNDATION DEPTH ESTABLISHED WITHIN THE HYDROLOGY AND HYDRAULIC BASIS OF DESIGN STUDY.
- NUMBER OF PLATFORMS: 4 - DUAL 630kw & 1 - DUAL 720kv INVERTER PLATFORM
- THE TRANSFORMER / INVERTERS WILL BE PLACED WITHIN A METAL ENCLOSURE OR COVERED BY A METAL SHADE STRUCTURE TO PROTECT THE EQUIPMENT FROM THE ELEMENTS.



NOTE:
PLACE SIGN ON 200' INTERVALS TO DENOTE OPEN-SPACE. SIGNS CAN ALSO BE ATTACHED TO PROPOSED FENCE OR ON TEE POST

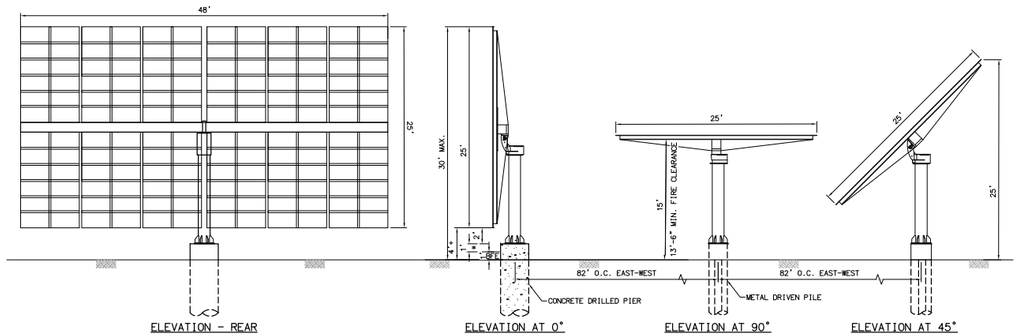
TYPICAL
OPEN SPACE SIGNAGE
N.T.S.





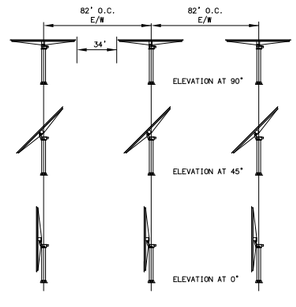
PRELIMINARY FOUNDATION DETAILS
N.T.S.

- DEPTH / TYPE OF FOOTING TO BE DETERMINED BY STRUCTURAL ENGINEER
- ALL SOLAR PANELS (AT MAXIMUM TILT) AND TRANSFORMER/INVERTER PLATFORM, SWITCH GEAR PAD, GENERATOR AND WATER TANK SHALL BE ELEVATED SO THAT THE LOWEST HORIZONTAL STRUCTURAL MEMBER IS AT LEAST ONE FOOT ABOVE THE ANTICIPATED INUNDATION DEPTH ESTABLISHED WITHIN THE HYDROLOGY AND HYDRAULIC BASIS OF DESIGN STUDY.

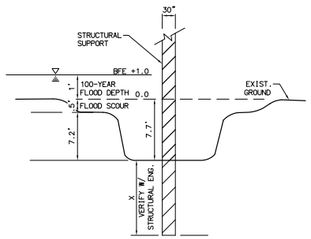


ELEVATIONS
ARRAY TRACKER
N.T.S.

- DEPTH / TYPE OF FOOTING TO BE DETERMINED BY STRUCTURAL ENGINEER
- * ALL SOLAR PANELS (AT MAXIMUM TILT) AND TRANSFORMER / INVERTER PLATFORM SHALL BE ELEVATED SO THAT THE LOWEST HORIZONTAL STRUCTURAL MEMBER IS AT LEAST ONE FOOT ABOVE THE ANTICIPATED INUNDATION DEPTH ESTABLISHED WITHIN THE HYDROLOGY AND HYDRAULIC BASIS OF DESIGN STUDY.



CPV ARRAY
SPACING DETAIL
N.T.S.



TYPICAL
SECTION
SCOURING DETAIL
N.T.S.

SOURCE: BORREGO VALLEY FLOOD MANAGEMENT REPORT DATED OCT. 1989

DESERT GREEN SOLAR FARM
BORREGO SPRINGS, CA
MODIFICATION FOR MUP 09-012
(NO CHANGE TO MUP 09-014)
ER NO. 09-05-001A

PROPOSED ELEVATIONS/DETAILS

FEBRUARY 22, 2013
SHEET 3 OF 3

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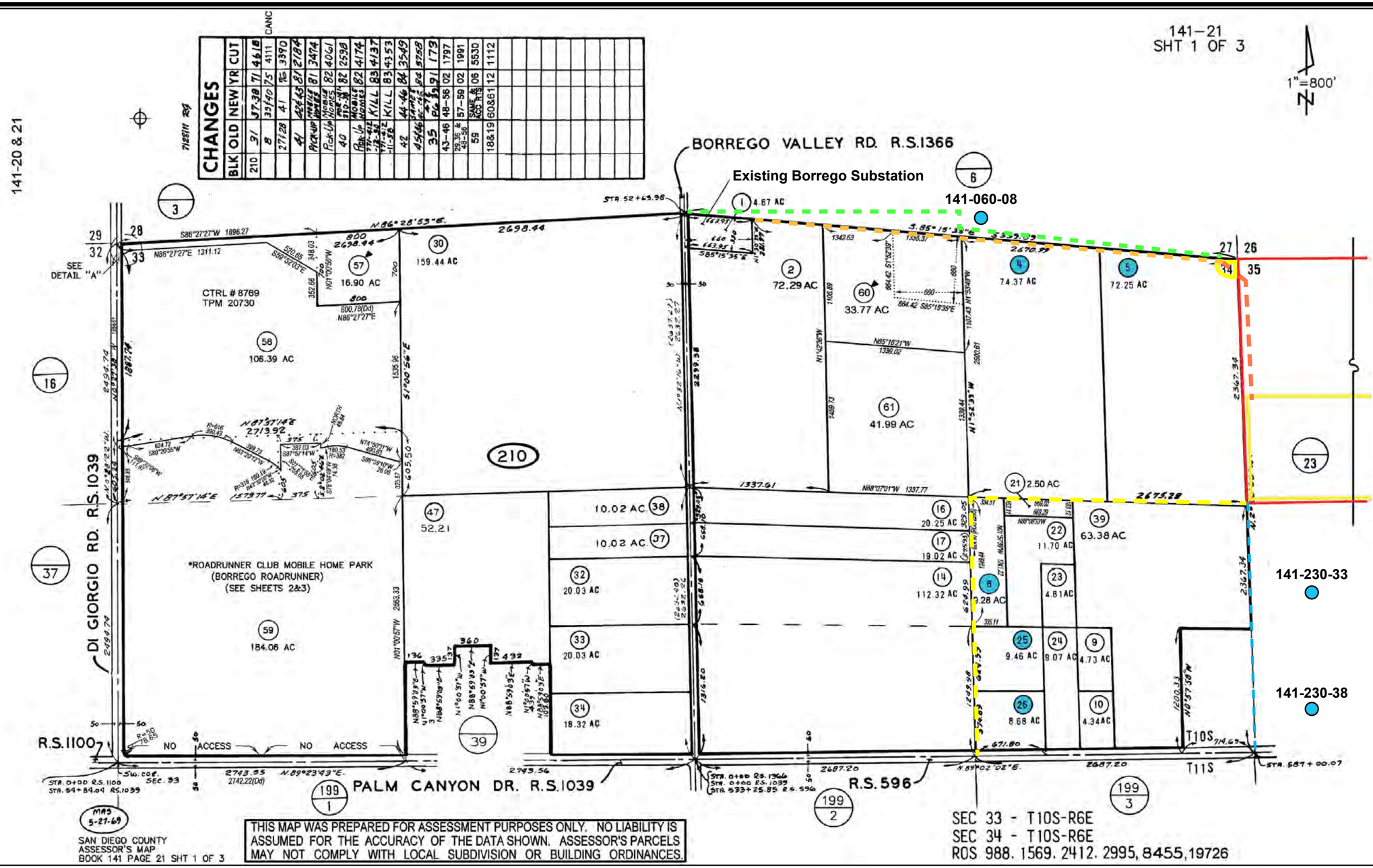
H:\PDATA\2510\5388\CADD\PLANNING\WORK\5388-MUP03-2SP.DWG BUTTS, KIMBERLY 2/14/2013 4:36 PM

SDMac:5388_tabloid_landscape-00.indd

Major Use Permit Plot Plan - Elevations / Details

Desert Green Solar Farm

Figure 3C



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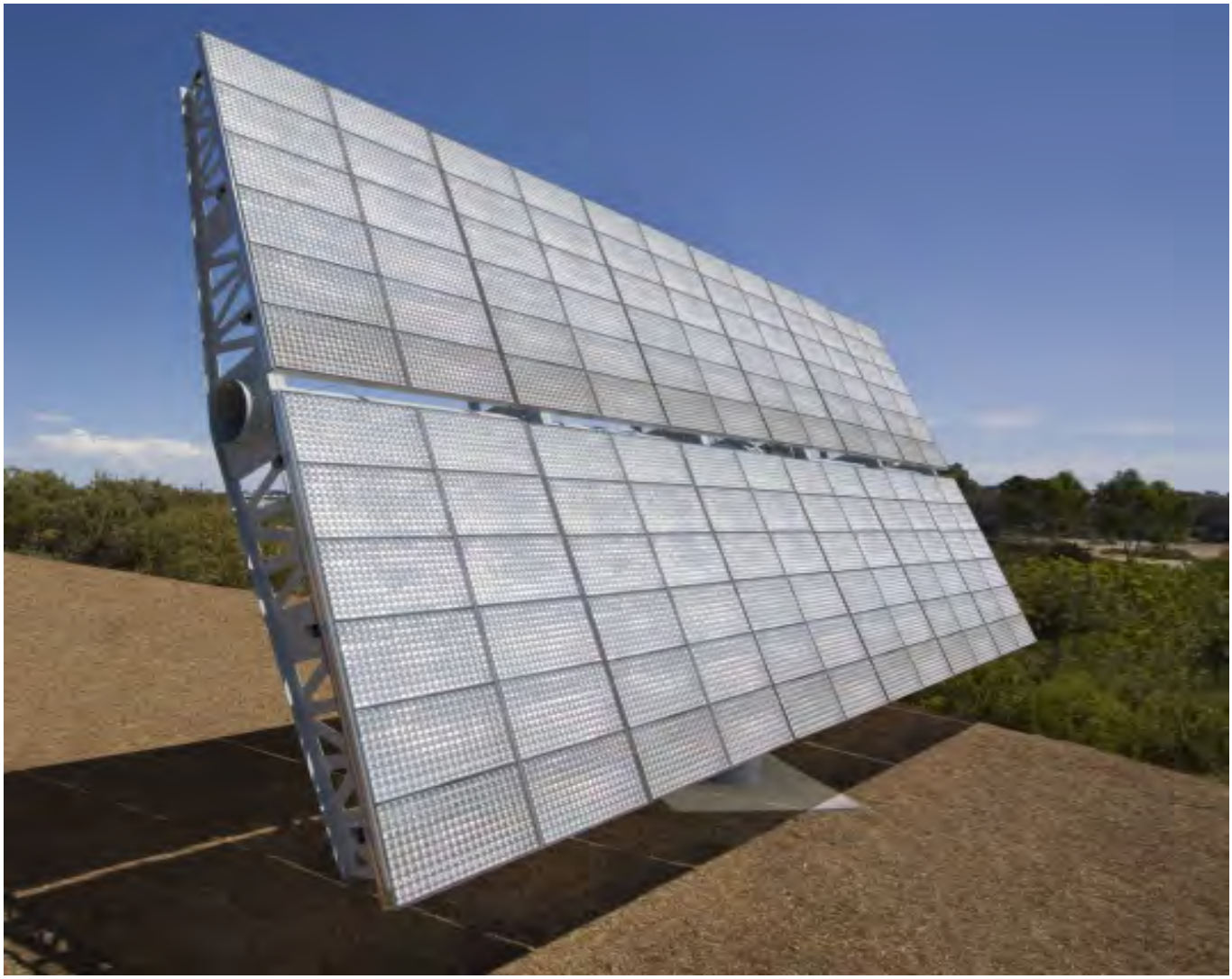
Parcel Boundary
Development Boundary (Solar Field)
Borrego Valley Road Access/Gen-Tie Route
SDG&E 12kV Line Extension to Existing Borrego Substation
Underground Gen-Tie Route
Palm Canyon Drive Access Route/West Water Line
East Water Line
Potentially Affected Parcels

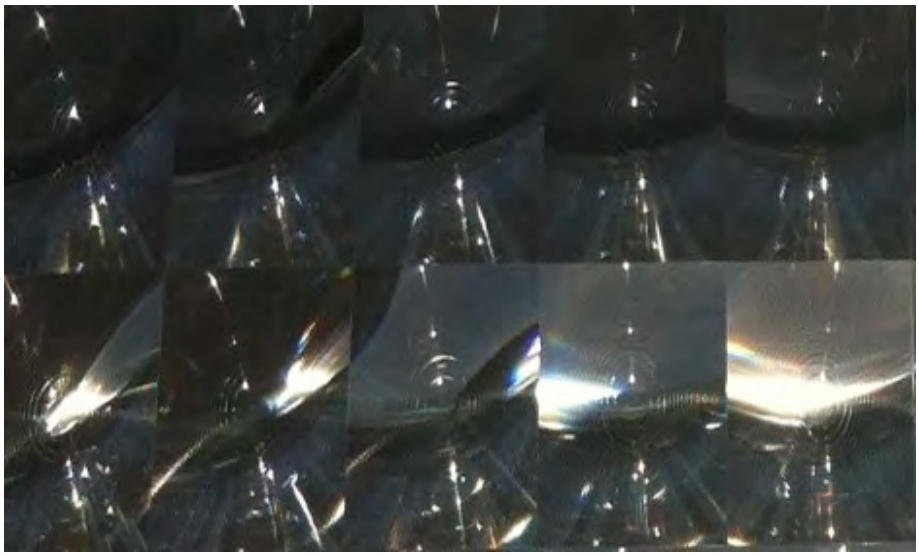
Assessor's Parcel Map / Potentially Affected Lands

Desert Green Solar Farm

Figure 3D



Conentrated photovoltaic (CPV) dual-axis tracking system



Concentrix modules lens plate (Fresnel lens)

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CPV System / Lens Plate

Desert Green Solar Farm

Figure 3E