

**Agricultural Preserve Disestablishment Report
Tierra del Sol Solar Farm Project
Major Use Permit 3300-12-010
Environmental Review Project Number 3910-120005
Rezone 3600-12-005
Boulevard, San Diego County, California**

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ATTACHMENT

A Photos of Land Uses in Project Vicinity	
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Tierra del Sol Solar Farm Project

1.0 INTRODUCTION

1.1 Project Location

The 420-acre project site is located within the community of Tierra del Sol in unincorporated southeastern San Diego County, California. The project area is located south of Interstate 8 (I-8) and is surrounded by private lands to the west and north characterized by rural landscape featuring large lot ranches, single family homes, small scale agriculture, recreational opportunities, and undeveloped land.(Figure 1, Regional Map and Figure 2, Vicinity Map). Private land managed by the U.S. Government is located east adjacent to the site and the 60-foot public reserve easement and the U.S./Mexico international border fence are located to the immediate south. In addition to the sparsely populated community of Tierra del Sol, the unincorporated community of Boulevard is located approximately 4.0 miles to the northeast. The site is located within Township 18 South, Range 6 East, and Sections 13 and 24 of the Tierra del Sol U.S. Geological Survey (USGS) 7.2-minute quadrangle. Elevations in the project area range from 3,566–3,700 feet above mean sea level (AMSL).

1.2 Project Description

The proposed Tierra del Sol solar farm project (project) would produce up to 60 megawatts (MW) of solar energy and would consist of approximately 2,657 Concentrator Photovoltaic (CPV) trackers on 420 acres in southeastern San Diego County near the unincorporated community of Boulevard, California (Figure 3, Site Plan). The proposed project will be developed in two phases. Phase I would include the construction and operation of 45 MWs on approximately 330 acres. Phase II would consist of the construction and operation of 15 MWs on approximately 90 acres. The project requires a Major Use Permit (MUP) to authorize a Major Impact Utility Pursuant to Sections 1350, 2705, and 2926 of the County of San Diego Zoning Ordinance. The project will also require a Rezone to remove Special Area Designator “A” to ensure compliance with Section 5100 of the Zoning Ordinance. An Agricultural Preserve Cancellation will also be required to develop the project site as proposed.

In addition to the trackers and direct current (DC) to alternating current (AC) conversion equipment (i.e., inverter and transformer units), Tierra del Sol would include the following primary components (see Figure 3, Site Plan and Figure 4, Gen-Tie Alignment):

- A 1,000-volt DC underground collection system and a 34.5-kilovolt (kV) overhead and underground collection system linking the trackers to the on-site project substation.

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- A 4-acre operation and maintenance (O&M) site, including a 60-foot by 125-foot (7,500-square-foot) O&M building. The O&M building would be used for storage, employee operations, and maintenance of equipment.
- A 3-acre on-site private collector substation site encompassing a fenced pad area of approximately 7,500 square feet and a maximum height of 35 feet to house approximately 3,750 square feet of equipment, including 450 square feet of metal-clad switchgear.
- A dual circuit 138 kV overhead/underground transmission line (gen-tie) would connect the project substation to the Rebuilt Boulevard Substation.

The Tierra del Sol substation and gen-tie, as well as San Diego Gas and Electric's (SDG&E's) interconnection facilities, would be sized to accommodate both Phase I and Phase II. The Tierra del Sol solar farm would be located primarily on private lands within unincorporated San Diego County; most of the gen-tie line would be located on private lands except for an approximately 0.5 mile portion of the underground gen-tie line that would be located within the County of San Diego right-of-way. Upon completion, Tierra del Sol would be monitored both on site at the 4-acre O&M annex and off site through a supervisory control and data acquisition (SCADA) system.

Primary access to the Tierra del Sol site would be provided via two points of ingress/egress along Tierra del Sol Road. The main entrance would be located where Tierra del Sol Road splits off along the northern boundary of the Tierra del Sol site. The secondary entrance would be located along the project site's western limits adjacent to Tierra del Sol Road. Two additional points of emergency egress/ingress would be provided at the project's southwestern point and northeastern point to facilitate U.S. Customs and Border Patrol access and to provide an alternate fire access point, respectively.

The Tierra del Sol gen-tie line would consist of an approximately one mile underground alignment leading northward from the on-site substation along the County right-of-way within Tierra del Sol Road for approximately 0.6 miles. The underground alignment would then be routed to the east via a 90-degree turn that would consist of an approximately 0.3 mile segment. A transition pole would be constructed at this location where the gen-tie line would transition from an underground alignment to an overhead alignment that would extend northward for approximately 3.5 miles, and end just east of Jewel Valley Road, where the gen-tie line would then transition back to an underground alignment for the remaining 1.5 miles and end at the interconnection point at the Rebuilt Boulevard Substation.



Project Site

MEXICO

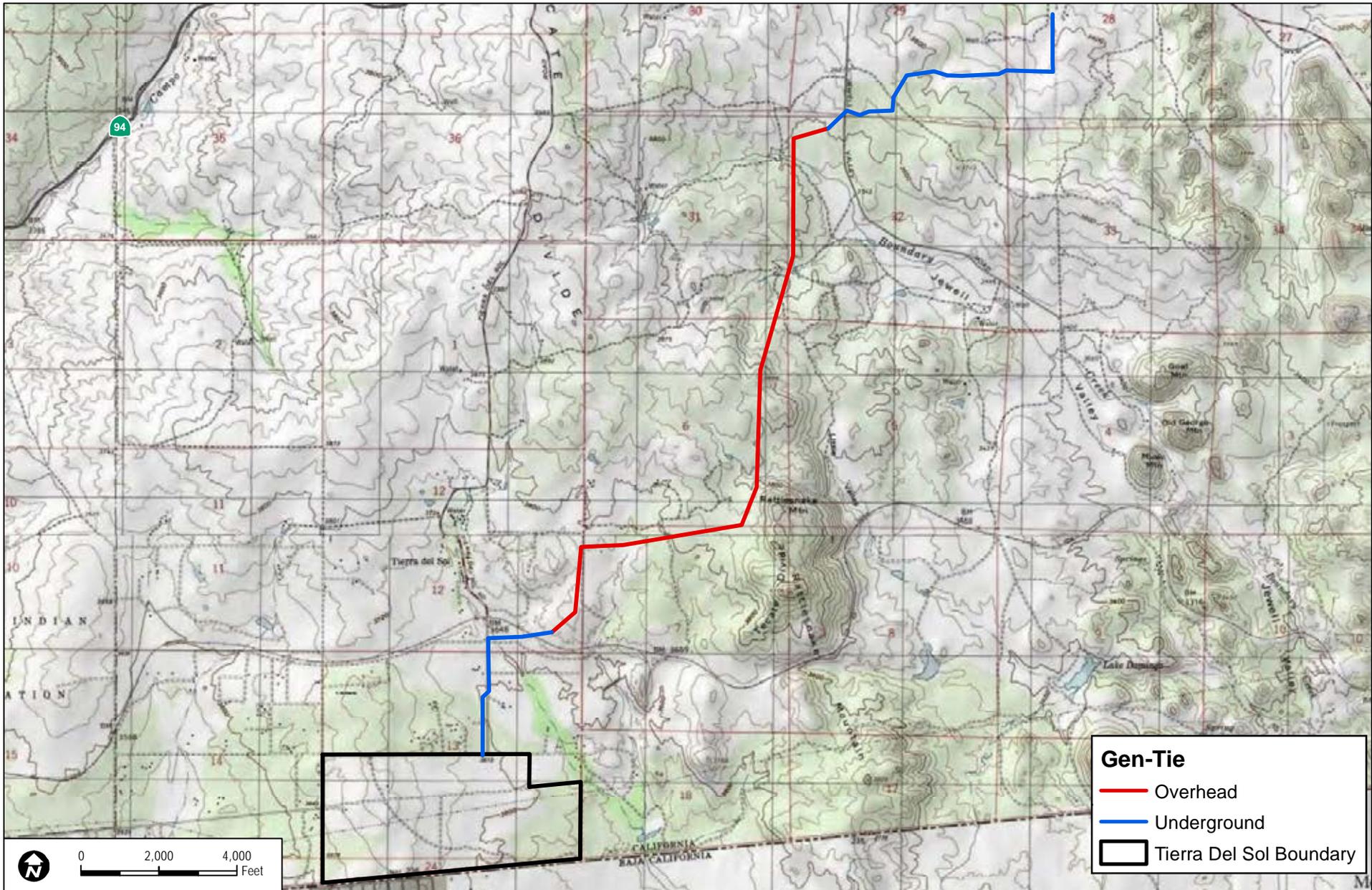
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FIGURE 1
Regional Map

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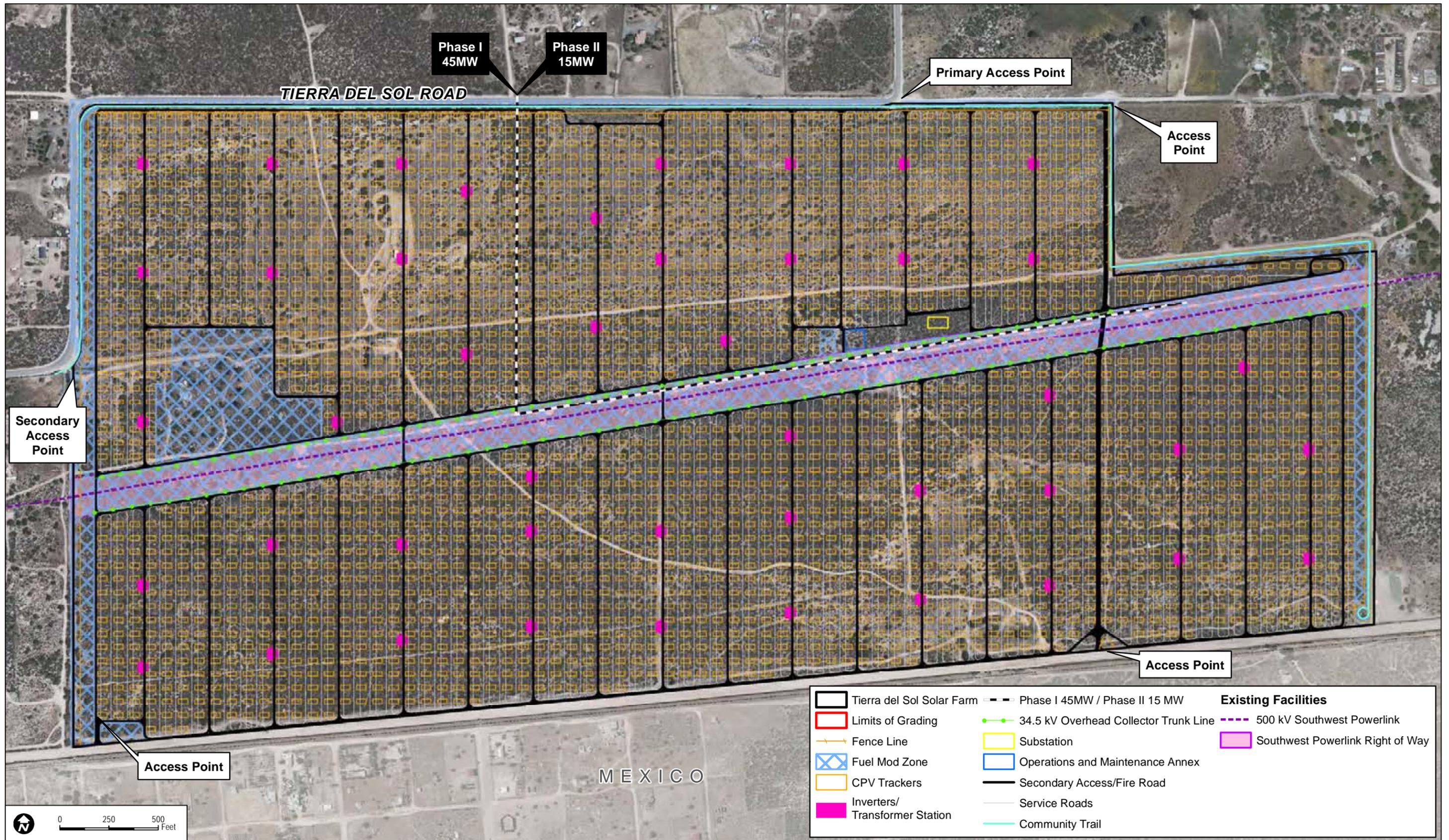


Gen-Tie

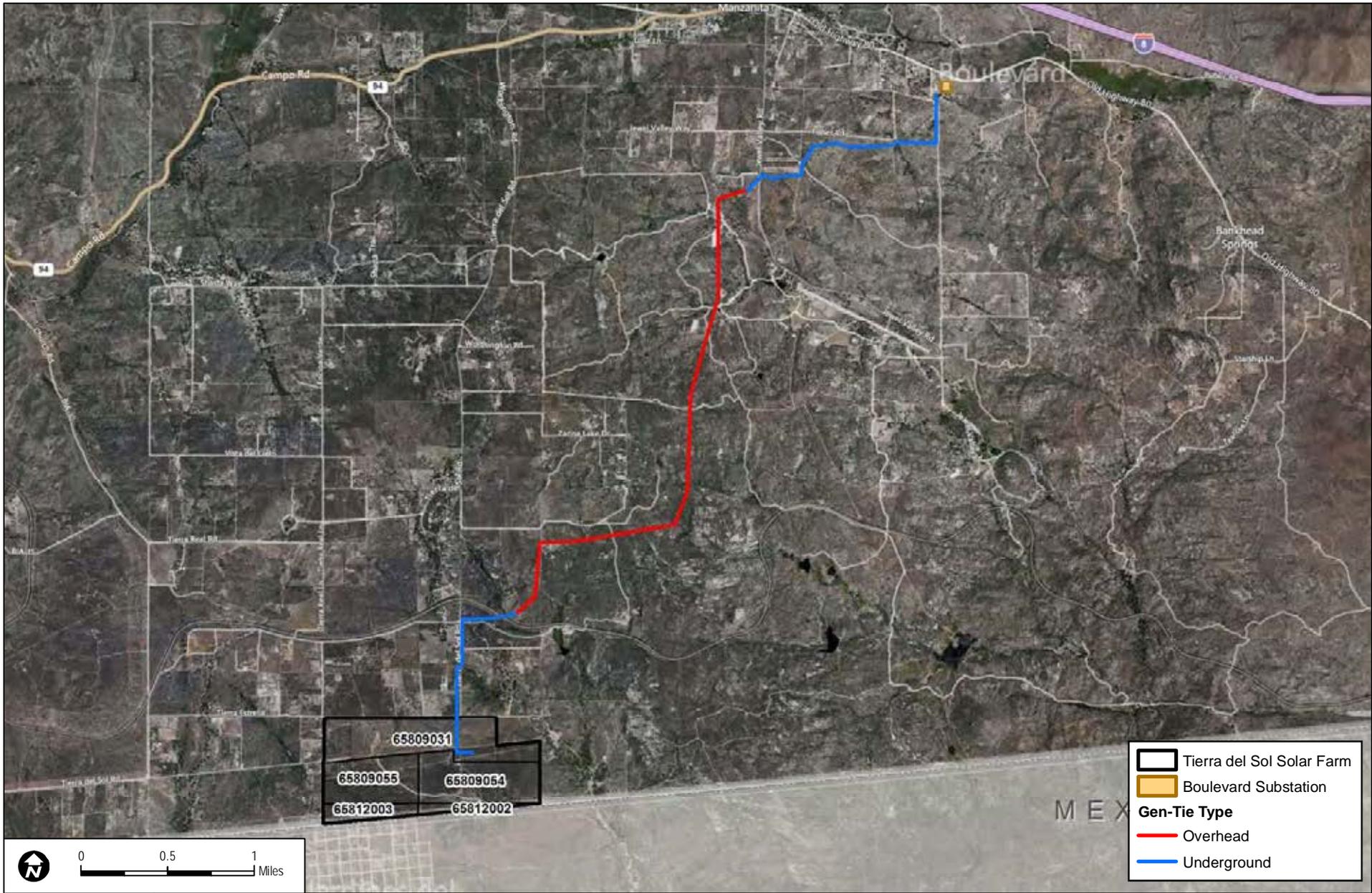
- Overhead
- Underground
- Tierra Del Sol Boundary

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- Tierra del Sol Solar Farm
- Boulevard Substation
- Gen-Tie Type**
- Overhead
- Underground



FIGURE 4
Gen-Tie Alignment

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Tierra del Sol Solar Farm Project

1.3 Physical Setting

The Tierra del Sol and larger Boulevard area has a high degree of variability in setting that can be characterized as predominantly rural and featuring large-lot ranches and single-family homes with a mixture of small-scale agriculture, recreational opportunities and open space. Similarly, the immediate project area is primarily rural and consists of single-family homes scattered amongst the hilly and chaparral covered landscape; however, past developments have resulted in a variable physical setting that includes both rural and urban elements. Prominent components that contribute to an urban physical setting include large-scale energy infrastructure associated with the Southwest Powerlink (SWPL), an existing 500 kV transmission line supported by 150-foot-tall steel lattice structures (four structures are located on the project site), several large, vertical, and metallic communication towers located at the White Star Communication Facility, the 60-foot wide dirt public reserve and the linear, rust colored U.S./Mexico international border fence (located immediately south of the project site). Other prominent man-made features in the area include the Golden Acorn Casino and Travel Center located approximately 6.5 miles northwest of the project site and the 25-wind turbine Kumeyaay Wind Farm located atop the Tecate Divide approximately 6.5 miles north of the project site on the Campo Reservation. Several Meteorological (MET) Testing Facilities (200-foot towers) are also scattered throughout the landscape. In addition to photos of the solar farm site and surroundings, Attachment A, Photos of Land Uses in Project Vicinity, contains images of the natural and built environment surrounding the gen-tie alignment.

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2.0 AGRICULTURAL PRESERVE DISESTABLISHMENT ANALYSIS

2.1 Agricultural Preserve (AP) 77-46

A portion of the proposed solar farm site (the entirety of APN 658-090-31-00) is zoned A70 and contains a Special Area “A” Designator which denotes inclusion of the parcel within an adopted County of San Diego Agricultural Preserve; see Figure 5, Zoning Designations, and Figure 6a, Agricultural Preserve – Existing. According to the County of San Diego, an agricultural preserve can be an area devoted to either agricultural use, open space use, recreational use or any combination of such uses. An agricultural preserve may be established by the Board of Supervisors in order to define the boundaries of areas within the County where the County is willing to enter into a preserve with landowners (County of San Diego 2010). Agricultural preserves contain restrictions on land use which are specified in both State and local regulations and landowners may enter into an agricultural preserve with the County whereby the assessment of their land will be based on its restricted use rather than on its market value.

The process of removing lands from an agricultural preserve and/or cancelling a Williamson Act contract is established by Board Policy I-38 and two options are available for contract termination: nonrenewal and cancellation.

None of the land proposed for the Tierra Del Sol Solar Farm Project is under Williamson Act contract with the County, however, a portion of the project area lies within existing agricultural preserve AP 77-46. The agricultural preserve is approximately 389 acres in land area and is comprised of four parcels: APNs 658-090-31-00, 658-090-30-00, 659-130-01-00, and 659-130-02-00 (see Figure 6a, Agricultural Preserve – Existing).

Development of the Tierra Del Sol Solar Farm would require the disestablishment of that portion of AP 77-46 covering APN 658-090-31-00 in order to remove the existing use limitations on the parcel and develop the site as proposed (see Figure 6b, Agricultural Preserve – Proposed). The approximate acreage of each parcel, as well as the applicable general plan land use and zoning designation for each parcel, is listed below in Table 1, Agricultural Preserve AP 77-46: General Plan Land Use/Zoning.

**Table 1
Agricultural Preserve AP 77-46¹: General Plan Land Use/Zoning**

Assessor Parcel Numbers	Approximate Acreage	General Plan Land Use Designation	Zoning ²
658-090-31-00 ³	163.73	Rural Lands (RL-80)	A70
658-090-30-00	24.82	Rural Lands (RL-80)	A70

Agricultural Preserve Disestablishment Report Tierra del Sol Solar Farm Project

Table 1
Agricultural Preserve AP 77-46¹: General Plan Land Use/Zoning

Assessor Parcel Numbers	Approximate Acreage	General Plan Land Use Designation	Zoning ²
659-130-01-00	159.23	Rural Lands (RL-80)	A70
659-130-02-00	41.34	Rural Lands (RL-80)	A70

¹ The contract for AP 77-46 was entered into with the County of San Diego in February 1978 and a nonrenewal notice was filed by the previous owner in 1988.

² Special Area Designator A is applicable to all parcels – see Figure 7a.

³ Parcel is located within the boundary of the proposed Tierra Del Sol Solar Farm.

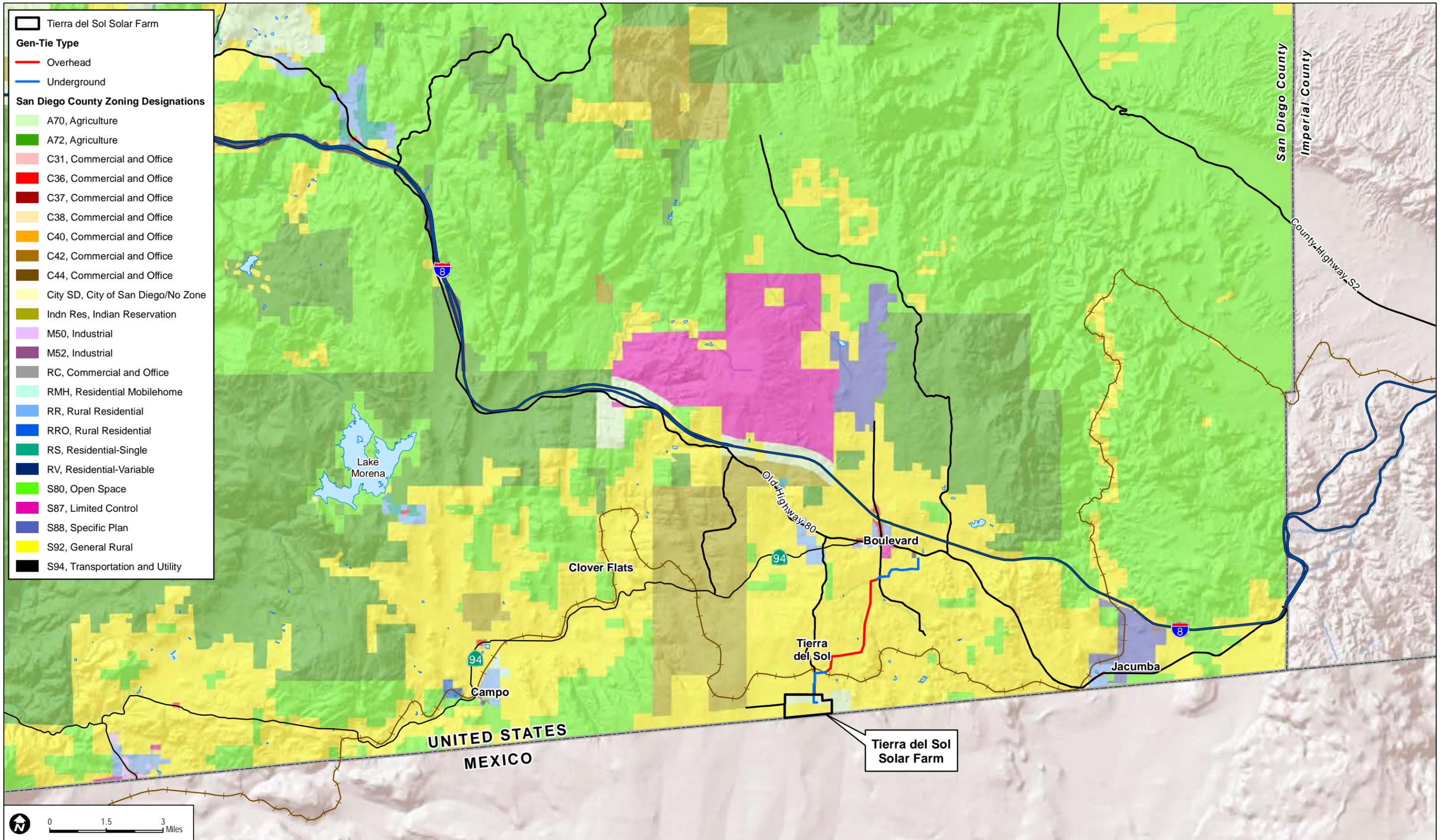
2.1.1 Effects of Proposed Disestablishment of AP 77-46

As shown in Figures 6a and 6b, AP 77-46 is the lone agricultural preserve located in the project area. The existing land uses in the surrounding area include single-family homes, ranch lands, tribal and private lands proposed for renewable energy development, and lands designated rural by the County of San Diego General Plan.

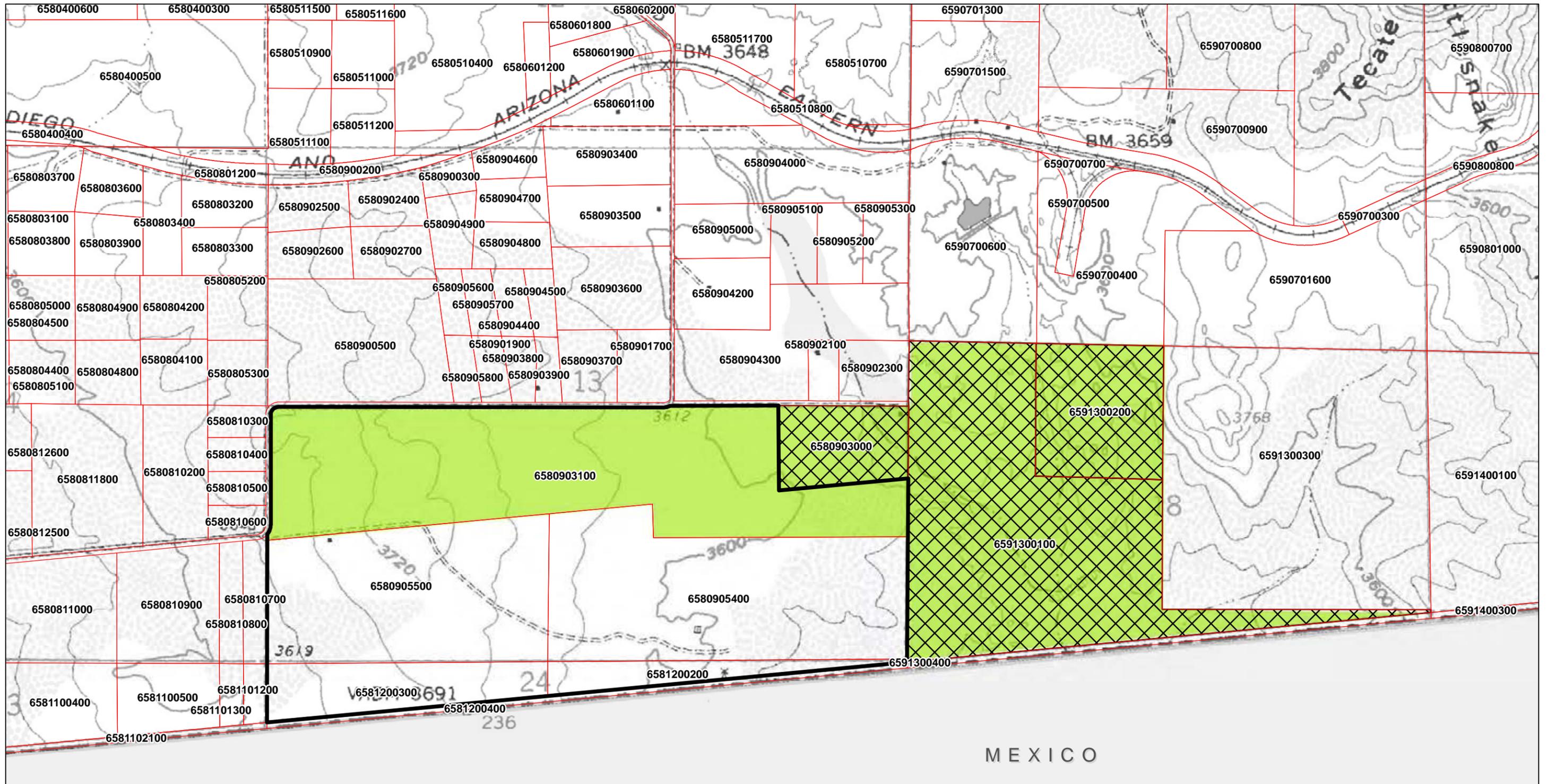
Disestablishment of that portion of the preserve covering APN 658-090-31-00 would not significantly impact the preserve’s viability as a protected area because the subject parcel has long since ceased to be an agricultural resource. First, the subject parcel is not actively engaged in agricultural production, grazing, or recreational use. County of San Diego staff has reviewed the subject parcel and have found no current agricultural or grazing operations and no Farmland Mapping and Monitoring Program (FMMP) designation applied to the site that would suggest that the site consists of either Prime Farmland, Farmland of Statewide Importance, or Farmland of Local Importance. The northern portion of the site was used as a cattle ranch from 1923 until 1978 (parcel 658-090-310 only) and again between 1995 and 2010 (on parcels 658-090-310, 658-090-550, and 658-120-030). The southeastern portions of the site, including parcels 658-090-540 and 658-120-020, were used for gardening, orchards, and cattle ranching between 1930 and 1956.

Although the subject property has been historically utilized for orchards and grazing in the past, currently, the site is vacant with no grazing activities occurring on site. In addition, APN 658-090-31-00 has been cleared in the past and four large lattice steel towers associated with the 500 kV SWPL transmission line traverse the central portion of the fenced site.

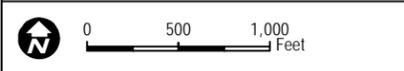
Second, soil types on site are unfavorable for agricultural purposes. Soil types include Kitchen Creek loamy coarse sand (5–9% slopes) and Mottsville loamy coarse sand (2–9% slopes), which have a Class 3 and Class 4 land capability classification for soil suitability.



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	Tierra del Sol Solar Farm (420 acres)
	Agricultural Preserve (389.12 acres)
	Williamson Act Lands (225.38 acres)
	San Diego County Parcels



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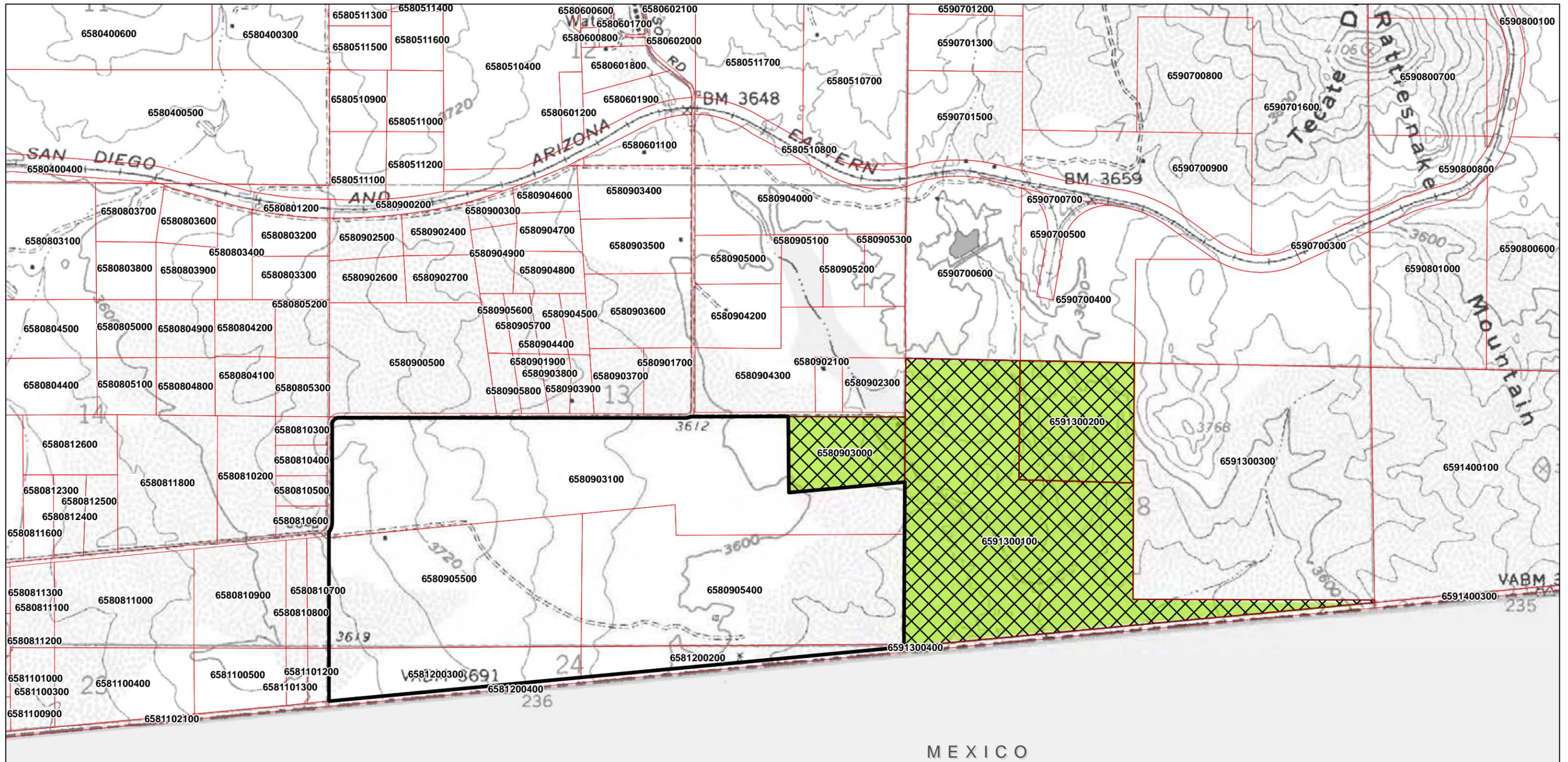
SOURCE: SanGIS 2012; California Department of Conservation 2009

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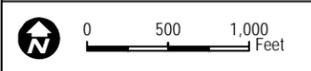
AGRICULTURAL PRESERVE DISESTABLISHMENT REPORT - TIERRA DEL SOL SOLAR PROJECT

FIGURE 6a
Agricultural Preserve - Existing

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	Tierra del Sol Solar Farm (420 acres)
	Agricultural Preserve (225.39 acres)
	Williamson Act Lands (225.39 acres)
	San Diego County Parcels



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SOURCE: SanGIS 2012; California Department of Conservation 2009

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AGRICULTURAL PRESERVE DISESTABLISHMENT REPORT - TIERRA DEL SOL SOLAR PROJECT

FIGURE 6b
Agricultural Preserve - Proposed

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A local agricultural resource assessment (LARA) model was prepared for the subject parcel; the subject parcel is located outside of the CWA service area and relies on groundwater for water supply. Therefore, despite its current inclusion in AP 77-46, the subject parcel APN 658-090-31-00 is not an agricultural resource.

Furthermore, given the existing land use development pattern and general lack of agricultural preserves in the immediate area (see Figures 6a and 6b), disestablishment of that portion of AP 77-46 that covers the subject parcel would be consistent with surrounding character of the community which can be described as primarily undeveloped areas with scarce single-story residential structures on large lots and few to no large scale agricultural operations.

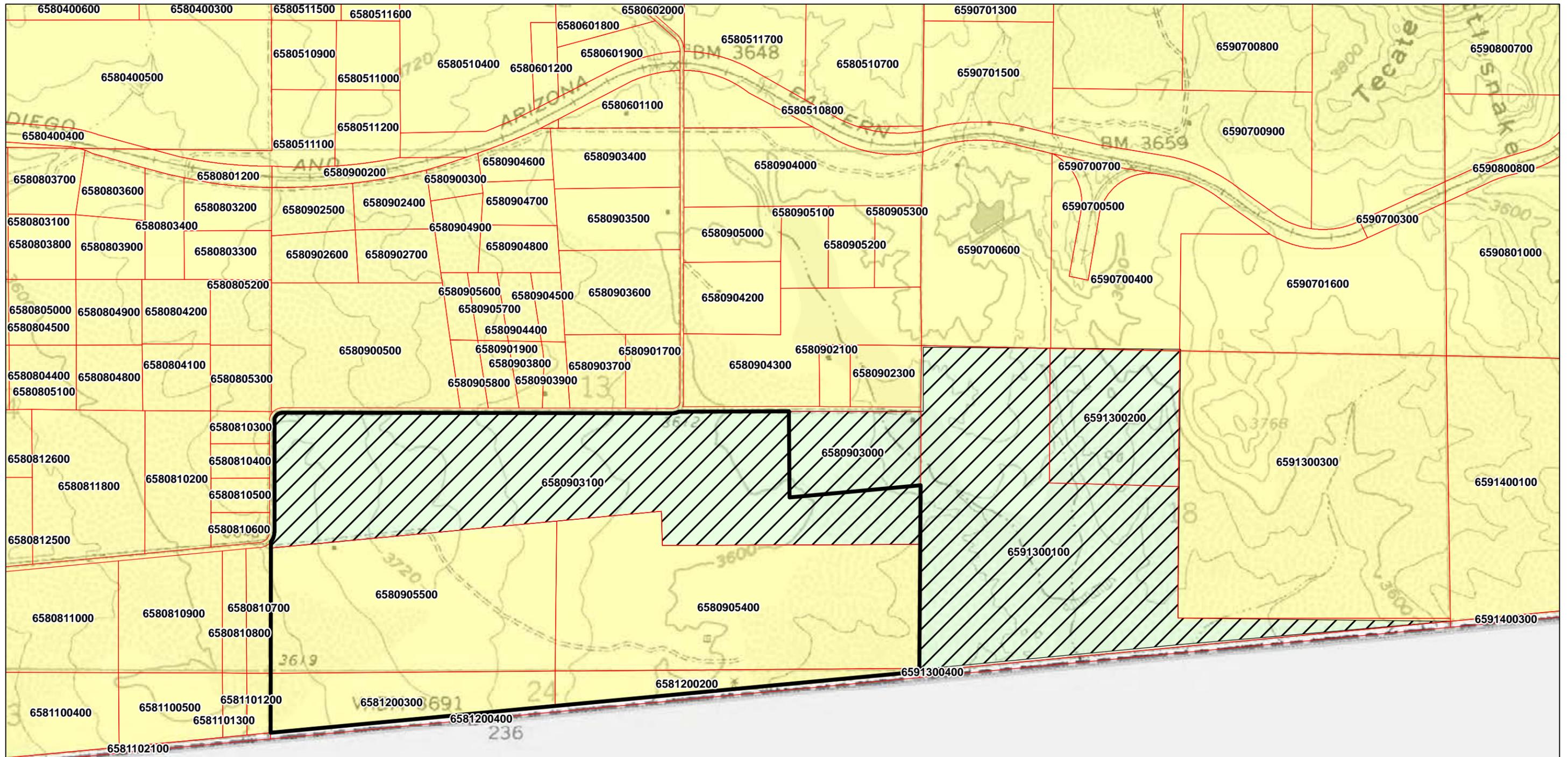
Figure 7a depicts the zoning designations applicable to AP 77-46 and surrounding parcels. As shown on Figure 7a, while AP 77-46 is comprised of parcels zoned A70 (Limited Agricultural), the immediate area and the larger Tierra Del Sol community is zoned S92 (General Rural) by the County of San Diego. In addition, with the exception of those parcels associated with AP 77-46, the Special Area Designator “A” is not applicable to and has not been applied by the County to parcels within the immediate project area.

Finally, disestablishment of the preserve and removal of the Special Area Designator “A” over the subject parcel will not affect the ability of the adjacent landowner to maintain his land under contract within AP 77-46 should he wish to do so. Although there is no commercial agricultural production occurring on the adjacent properties located in AP 77-46, operation of the Tierra Del Sol Solar Farm would not preclude the adjacent landowner from planting row crops, orchards, or grazing cattle in the future. Also, future agricultural activities (i.e., row crops, orchards, cattle grazing, etc.) on adjacent parcels under contract within AP 77-46 are not anticipated to conflict with operation of CPV trackers on the project site. CPV trackers would be set back from the project boundary approximately 70 feet (including a 50-foot fire buffer and 20-foot perimeter road) such that they would not directly abut the adjacent properties and therefore, operation of proposed CPV trackers are not likely to conflict with and/or affect agricultural production and/or grazing (i.e., through shading effects, etc.). Regarding activities on adjacent parcels that could generate dust that could accumulate on trackers, in-place tracker washing would occur every 6 to 8 weeks and mobile crews will also be available for dispatch whenever on-site maintenance is required.

Therefore, disestablishing that portion of the agricultural preserve (AP 77-46) that applies to the subject parcel APN 658-090-31-00 (see Figure 6b and 7b) and removal of the Special Area Designator “A” would be consistent with the surrounding land uses and zoning designations existing in the immediate project area.

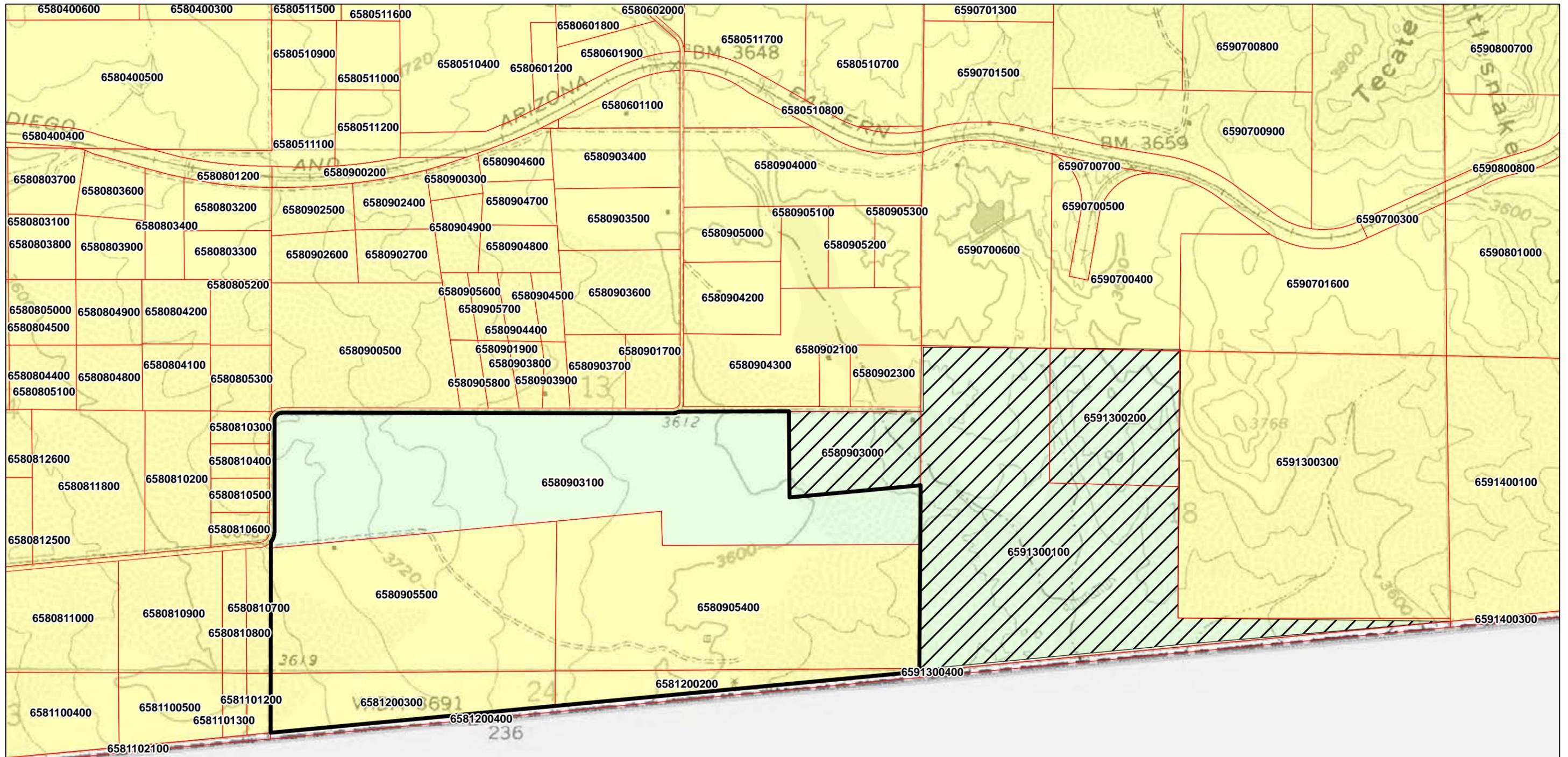
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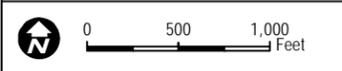


	<p>Legend</p> <ul style="list-style-type: none"> Tierra del Sol Solar Farm (420 acres) San Diego County Parcels San Diego County Zoning Designations A70, Agriculture S92, General Rural Special Area Designation 'A'
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Tierra del Sol Solar Farm (420 acres)
 San Diego County Parcels
San Diego County Zoning Designations
 A70, Agriculture
 S92, General Rural
 Special Area Designation 'A'



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SOURCE: SanGIS 2012; California Department of Conservation 2009

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AGRICULTURAL PRESERVE DISESTABLISHMENT REPORT - TIERRA DEL SOL SOLAR PROJECT

FIGURE 7b
Special Area Designations - Proposed

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ATTACHMENT A

Photos of Land Uses in Project Vicinity

ATTACHMENT A
Photos of Land Uses in Project Vicinity



Photo 1: Southwest Powerlink 500 kV Steel Lattice Towers located within the project site, running east/west.

ATTACHMENT A (Continued)



Photo 2: Southwest Powerlink 500 kV towers located along Tierra del Sol Road and traversing the project site east/west.



Photo 3: Kumeyaay Wind Farm consisting of 25 wind turbines approximately 300 feet in height (wind farm located approximately 6.5 miles north of the proposed solar farm site).

ATTACHMENT A (Continued)

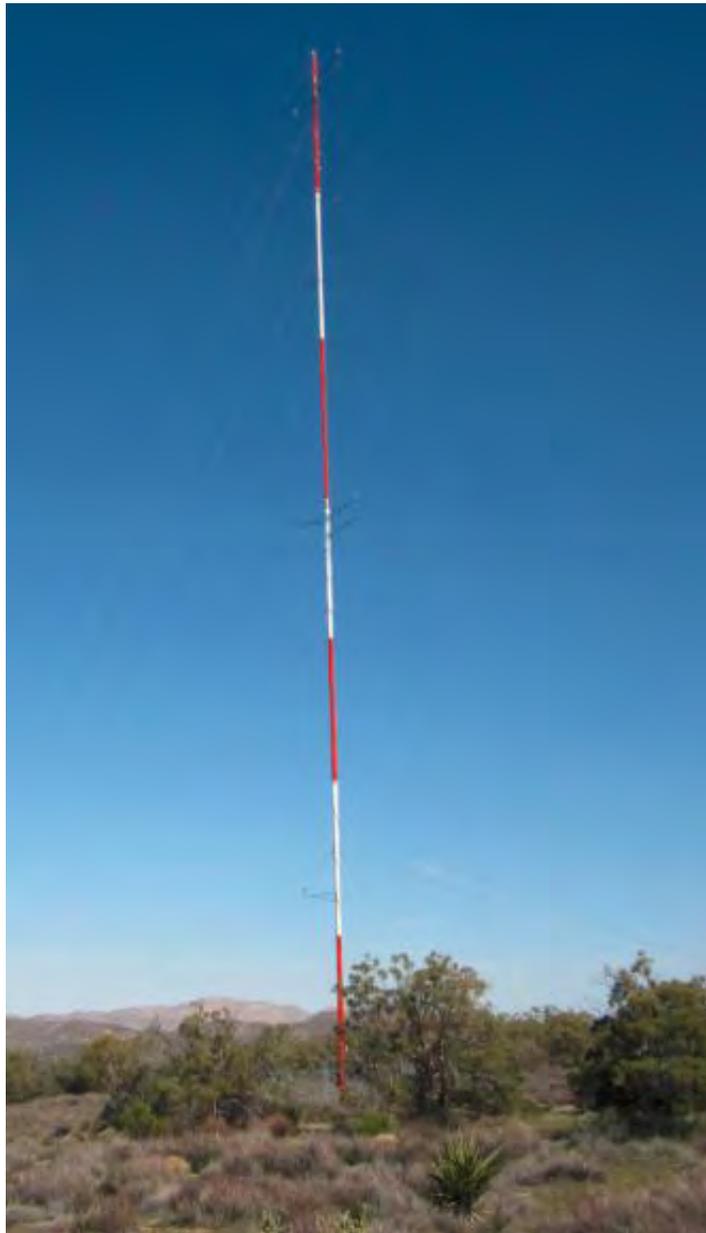


Photo 4: MET Towers are scattered across the landscape within the vicinity of the project area consisting of tubular towers that are approximately 200 feet in height.

ATTACHMENT A (Continued)



Photo 5: Scattered single-family residences located along the northern limits of Tierra del Sol Road located adjacent to the project site.



Photo 6: New U.S Border Patrol Station under construction along Ribbonwood Road that will station up to 250-border patrol agents (photo taken February 2013).

ATTACHMENT A (Continued)



Photo 7: Existing U.S Border Patrol Station adjacent to I-8 and Ribbonwood road.



Photo 8: Lux-Motel located at the intersection of Jewel Valley Road and Interstate 8.

ATTACHMENT A (Continued)



Photo 9: View from Tierra del Sol Road looking to the north towards the White Star Communications Tower facilities.



Photo 10: Typical materials that are stored on private properties within the vicinity of the project site.

ATTACHMENT A (Continued)



Photo 11: View of US/Mexico International Border fence located along the southern limits of the project site.



Photo 12: View from Tierra del Sol Road looking to the northeast towards oak trees and distant chaparral covered terrain. Local infrastructure is visible in the foreground.

ATTACHMENT A (Continued)



Photo 13: View from Tierra Del Sol looking to the southwest towards San Diego and Arizona Eastern Railroad track and chaparral vegetation.



Photo 14: View from Jewel Valley Road to the west-northwest towards oak clusters, short grasses and local electrical infrastructure in characteristic Jewel Valley landscape.

ATTACHMENT A (Continued)



Photo 15: View from Tierra del Sol Road looking to the southwest towards Rattlesnake Mountain and chaparral and boulder covered terrain.



Photo 16: View from Jewel Valley Road to the east from north of gen-tie line crossing at Jewel Valley Road.

ATTACHMENT A (Continued)



Photo 17: View from Old Highway 80 to the south towards existing Boulevard Substation.