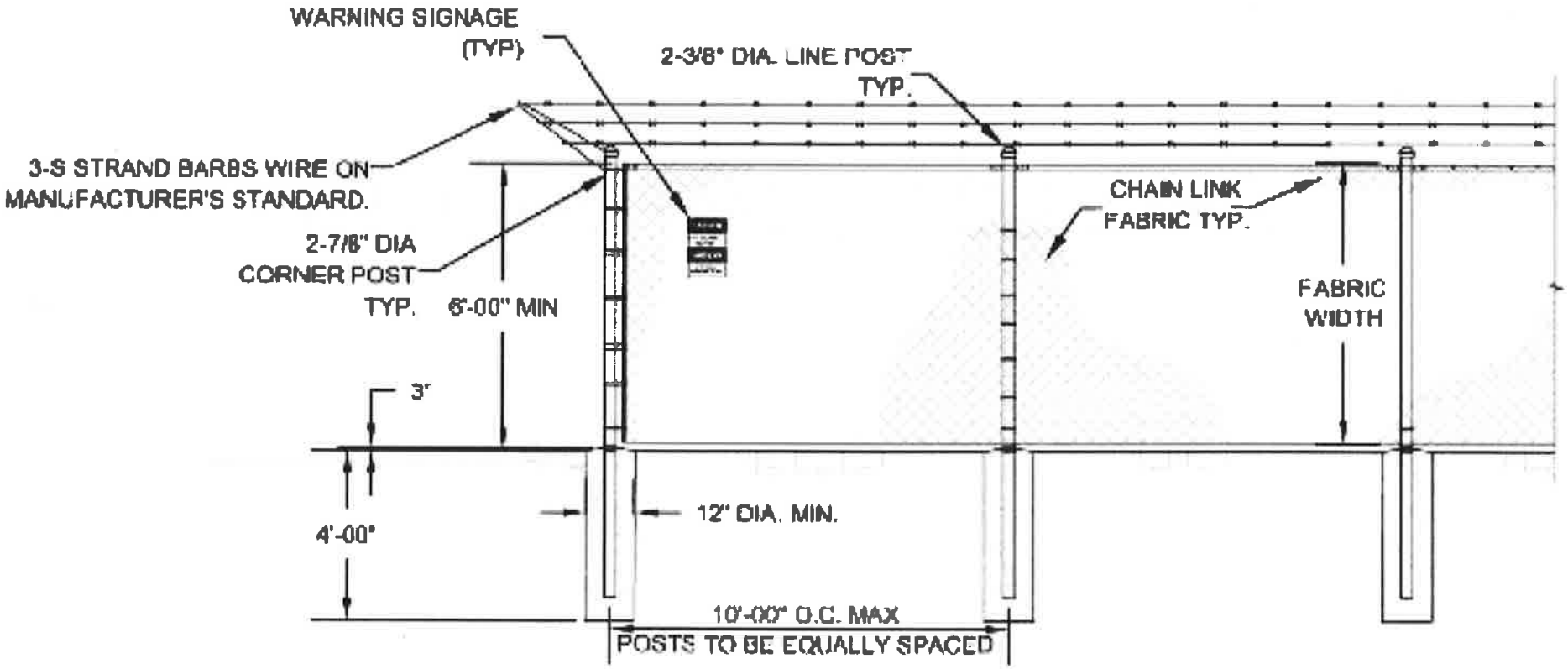
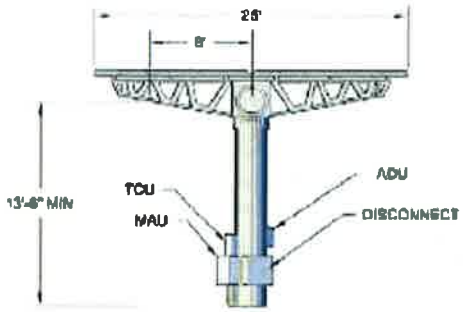
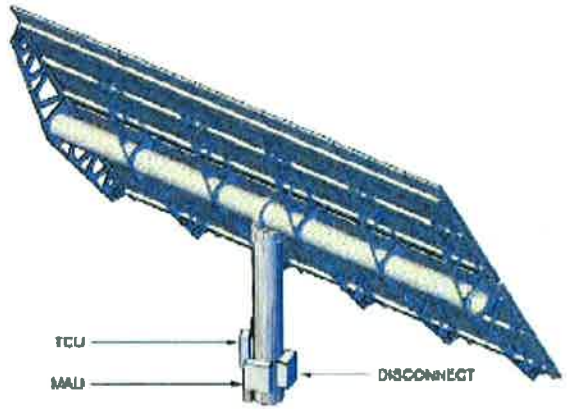
PROJECT COMPONENTS

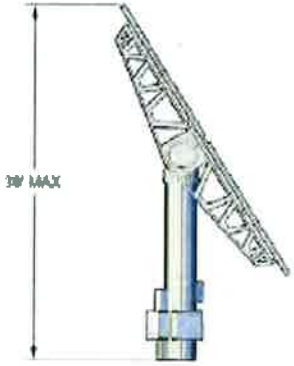

WARNING SIGNAGE
(TYP)
2-3/8" DIA. LINE POST
TYP.
3-S STRAND BARBS WIRE ON
MANUFACTURER'S STANDARD.
2-7/8" DIA
CORNER POST
TYP.
6'-00" MIN
CHAIN LINK
FABRIC TYP.
FABRIC
WIDTH
3"
4'-00"
12" DIA. MIN.
10'-00" O.C. MAX
POSTS TO BE EQUALLY SPACED



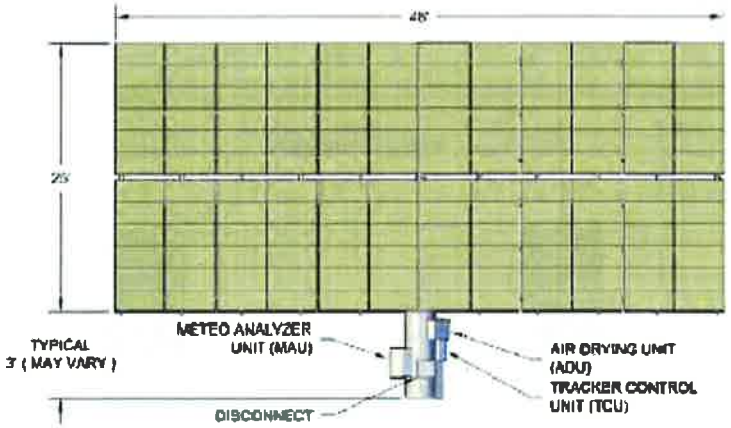
1 STOW MODE VIEW



2 ISOMETRIC VIEW

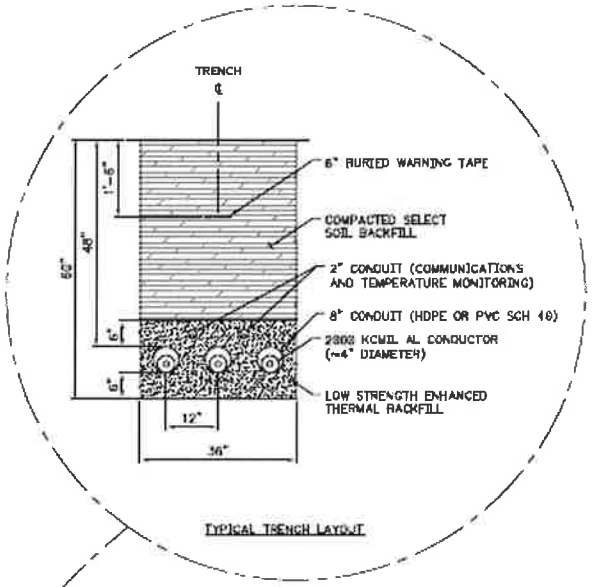


3 SIDE VIEW

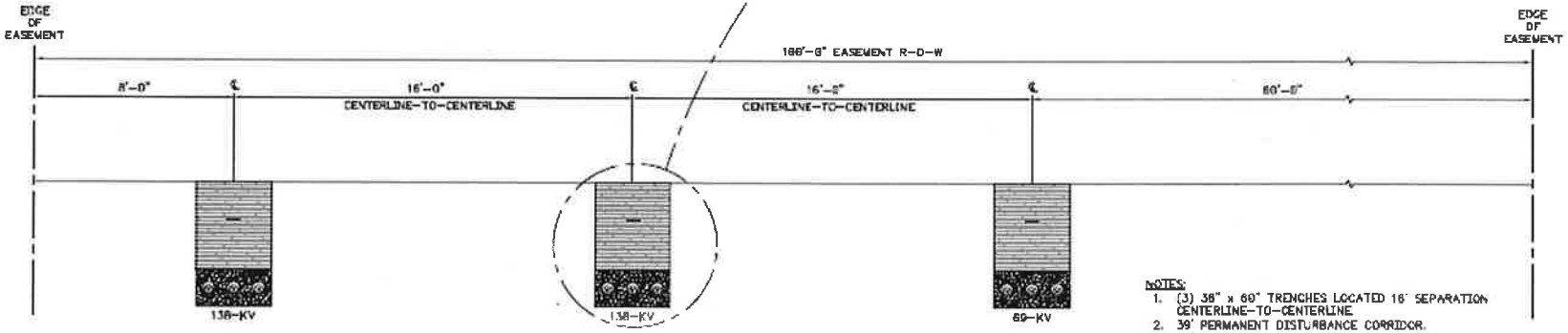


4 FRONT VIEW

PRELIMINARY,
NOT FOR CONSTRUCTION



TYPICAL TRENCH LAYOUT



NOTES:
1. (3) 36" x 69" TRENCHES LOCATED 16' SEPARATION CENTERLINE-TO-CENTERLINE.
2. 39' PERMANENT DISTURBANCE CORRIDOR.
3. 50' TEMPORARY CONSTRUCTION CORRIDOR.

ASSUMPTIONS:
1. TRENCH DIMENSIONS AND CORRIDOR WIDTH ASSUME A SOIL THERMAL CHARACTERISTIC OF 250 RHO
2. ACTUAL TRENCH DIMENSIONS AND WIDTH OF PERMANENT DISTURBANCE CORRIDOR MAY VARY DEPENDING ON ACTUAL SOIL CONDITIONS.

TriAxle Engineering, inc.

DSGN PHV
DR [illegible] BEO
CHK PHV
APVD

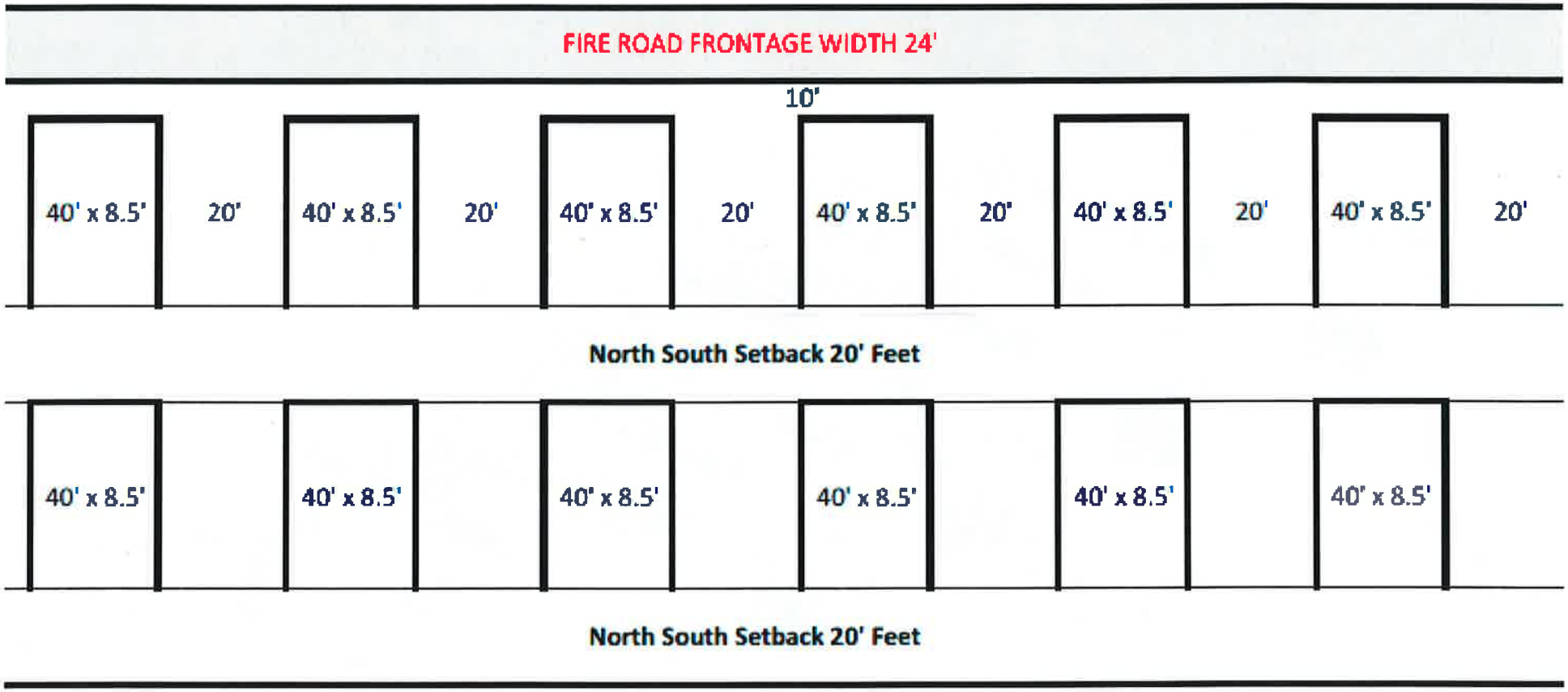
NO	DATE	REVISION	BY	APVD

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

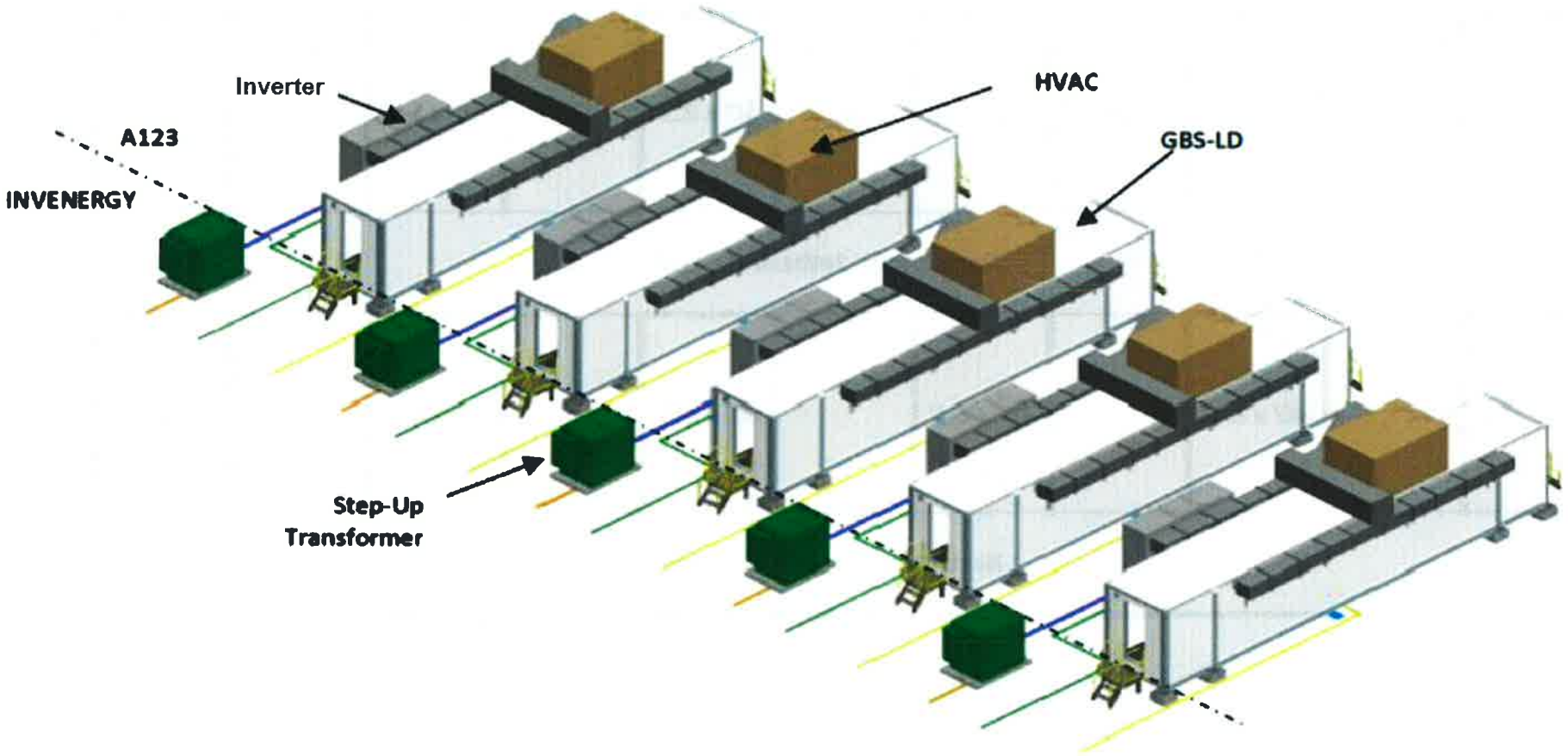
RUGGED SOLAR/TULE WIND SHARED USED FACILITY
–
SAN DIEGO COUNTY, CALIFORNIA

138-KV DOUBLE-CIRCUIT & 69-KV SINGLE-CIRCUIT
UNDERGROUND CONCEPT DRAWING

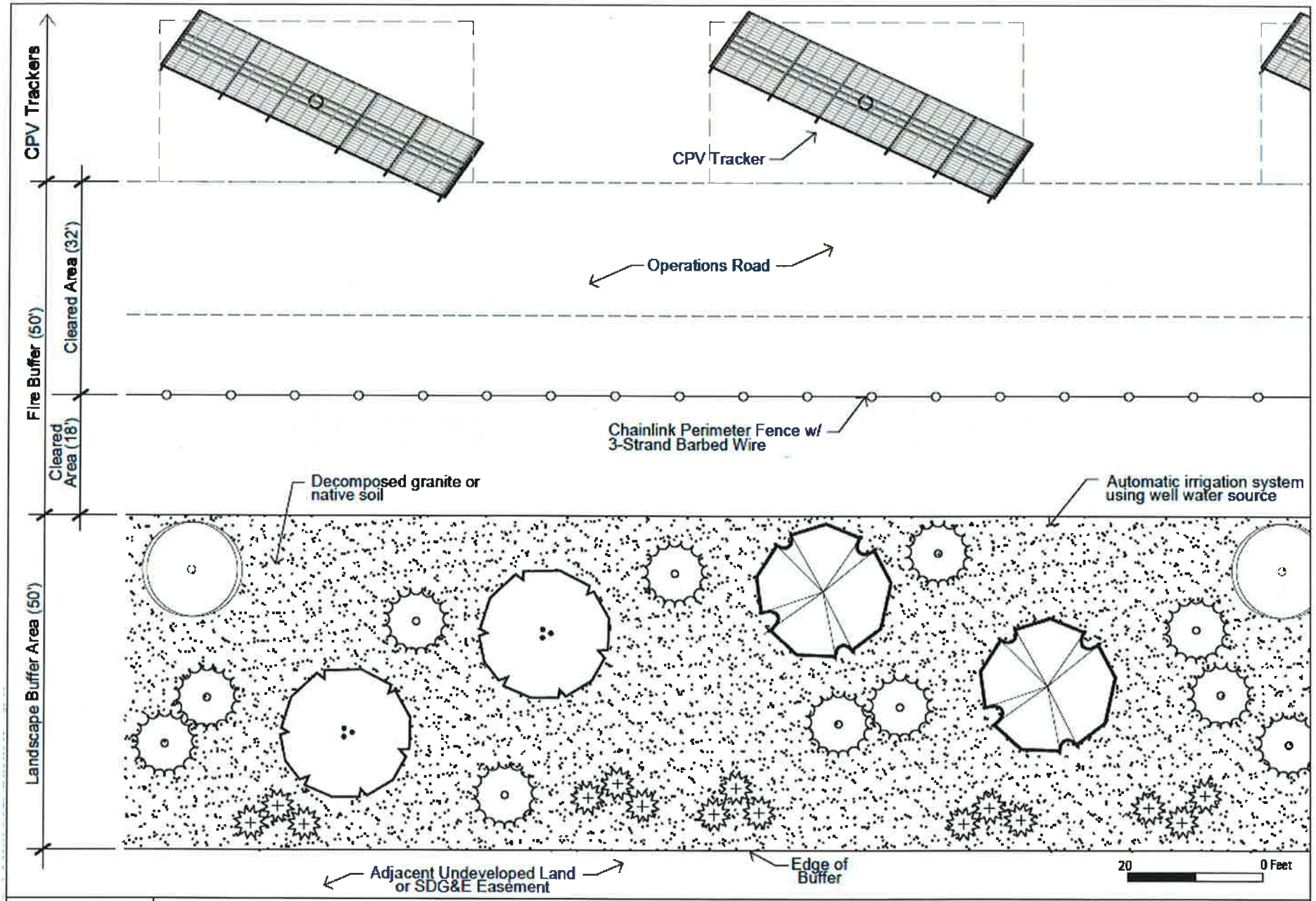
SHEET	1
TPM NO.	13334-81
DATE	AUG 2013
PROJ NO.	13334


FIRE ROAD FRONTAGE WIDTH 24'
10'
40' x 8.5'
20'
40' x 8.5'
20'
40' x 8.5'
20'
40' x 8.5'
20'
40' x 8.5'
20'
40' x 8.5'
20'
North South Setback 20' Feet
40' x 8.5'
40' x 8.5'
40' x 8.5'
40' x 8.5'
40' x 8.5'
40' x 8.5'
North South Setback 20' Feet

Example Battery Storage Container Layout



LANDSCAPE SCREENS



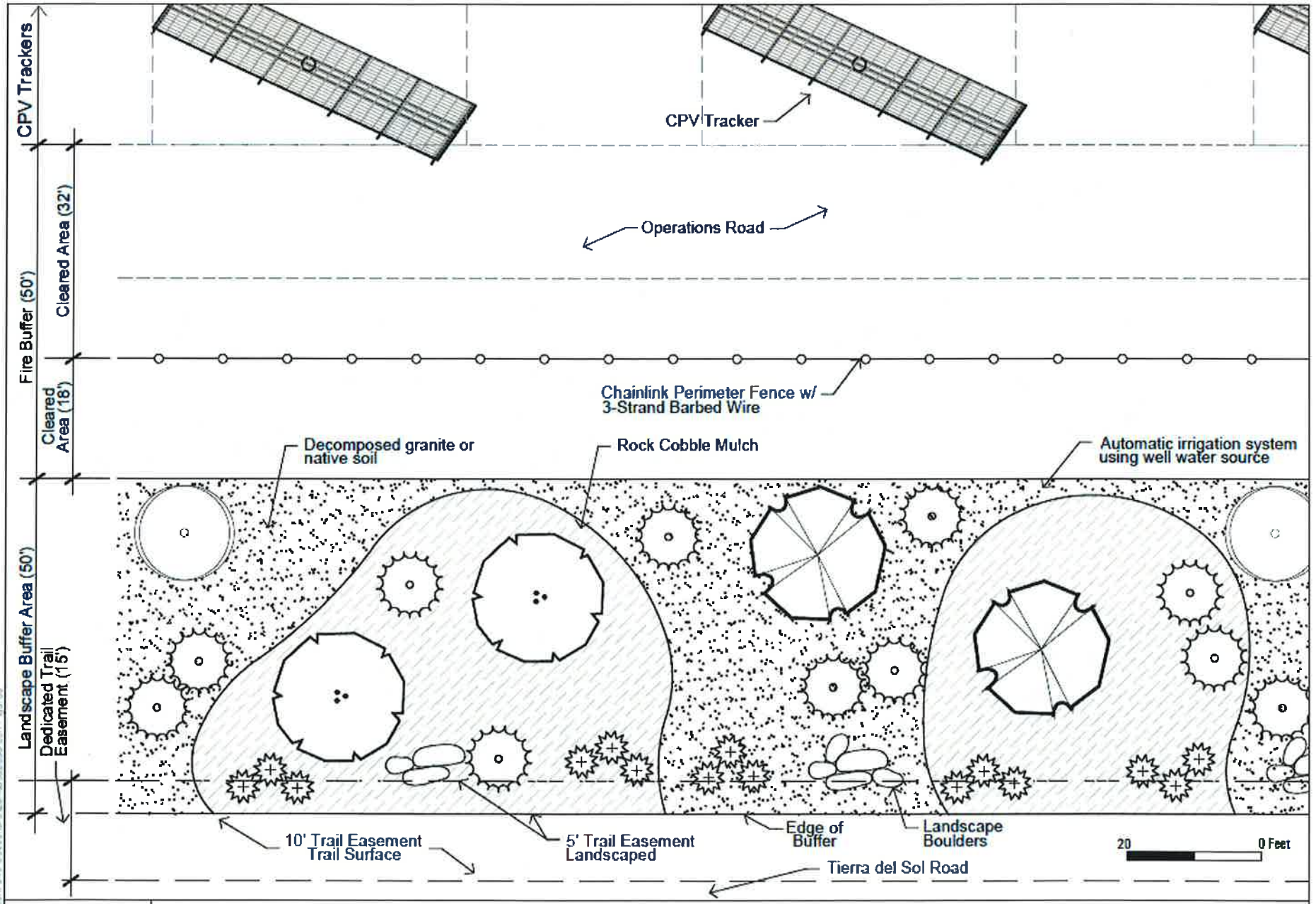
DUDEK

7123

FIGURE 4

Rugged Solar Landscape Screen - Typical

SOITEC LANDSCAPE SCREEN MEMORANDUM



DUDEK

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FIGURE 3

Tierra del Sol Landscape Screen - Typical

SOITEC LANDSCAPE SCREEN MEMORANDUM

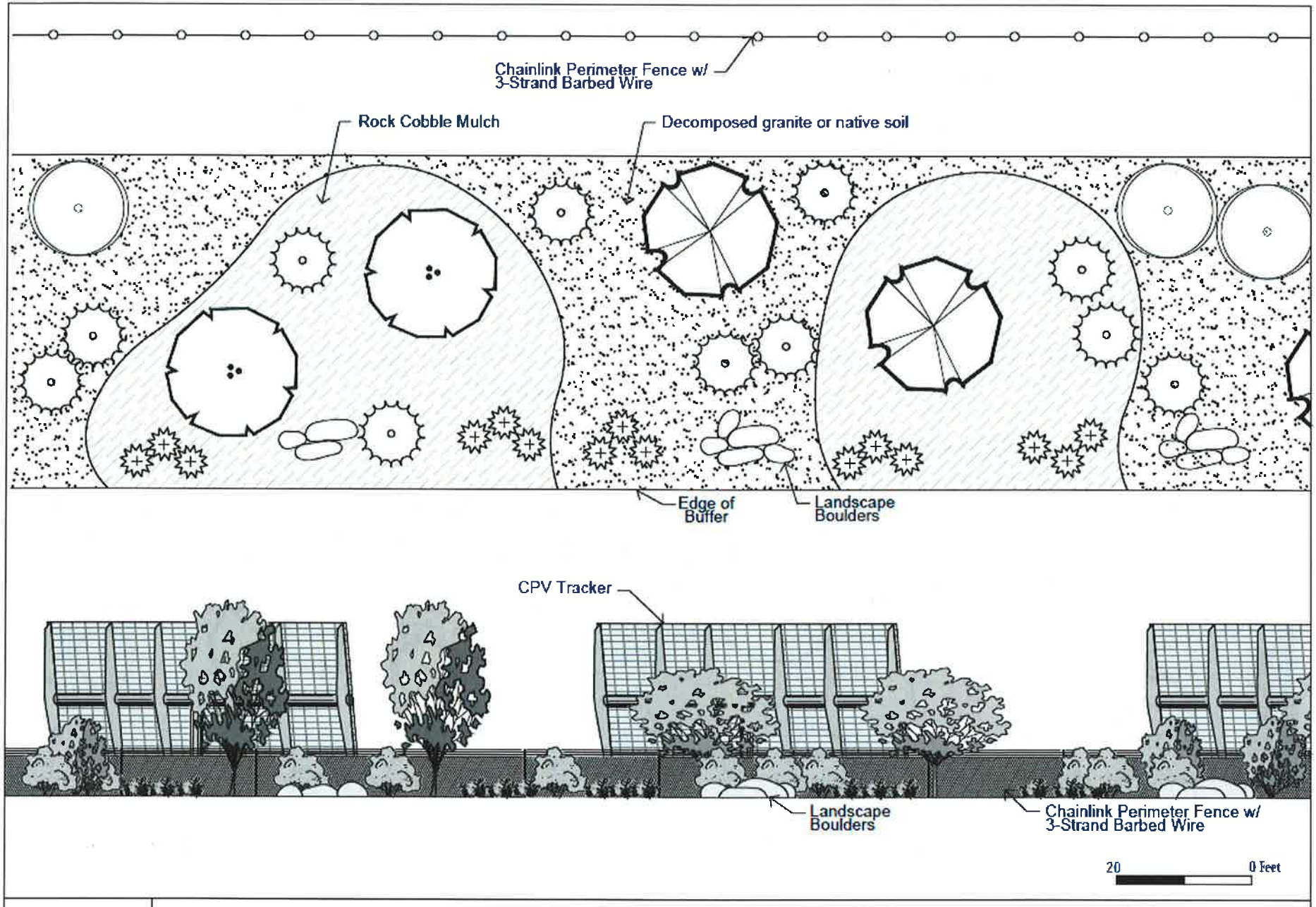

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FIGURE 2

Landscape Screen Elevation

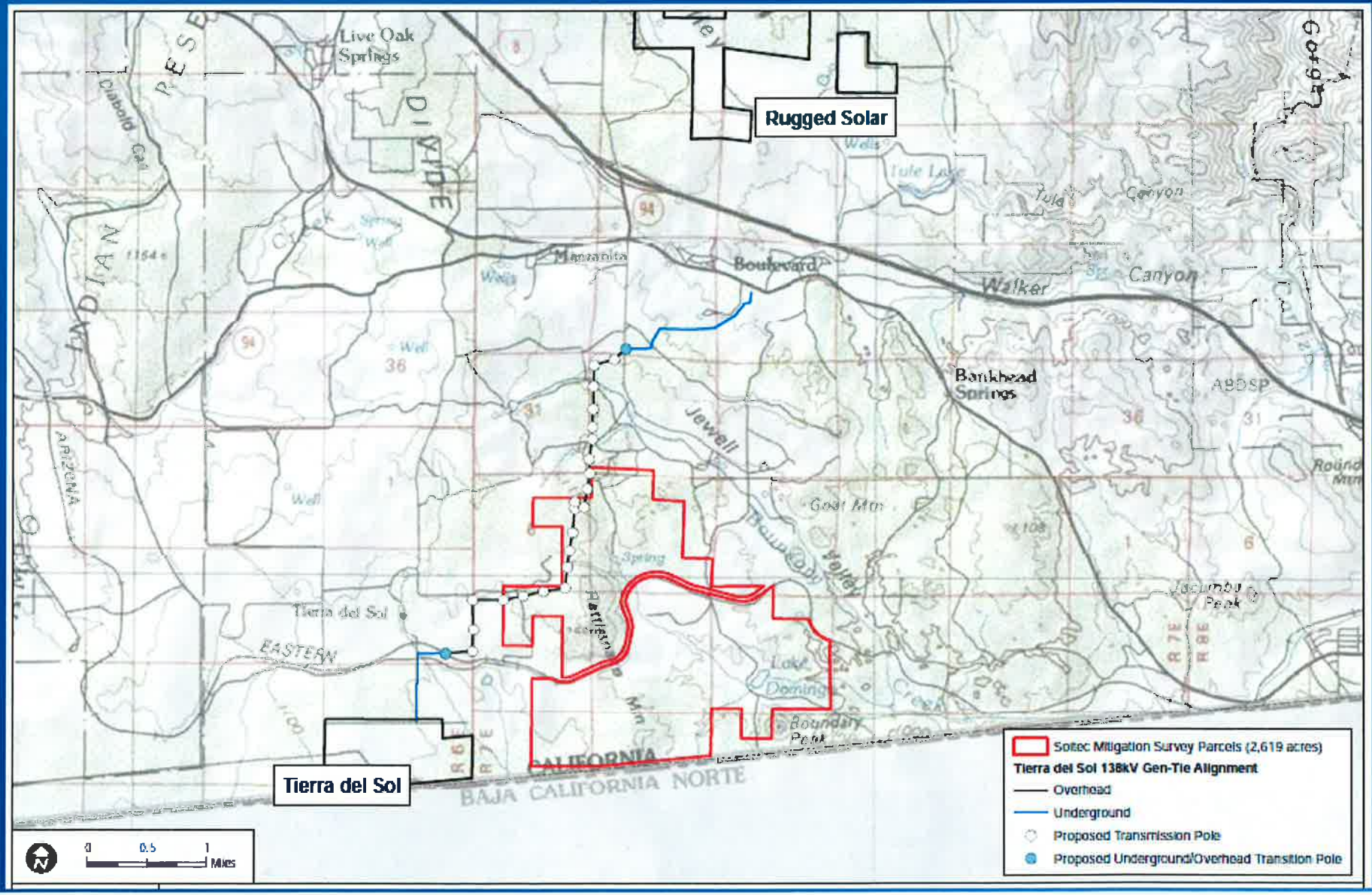
SOITEC LANDSCAPE SCREEN MEMORANDUM

BIOLOGICAL RESOURCES

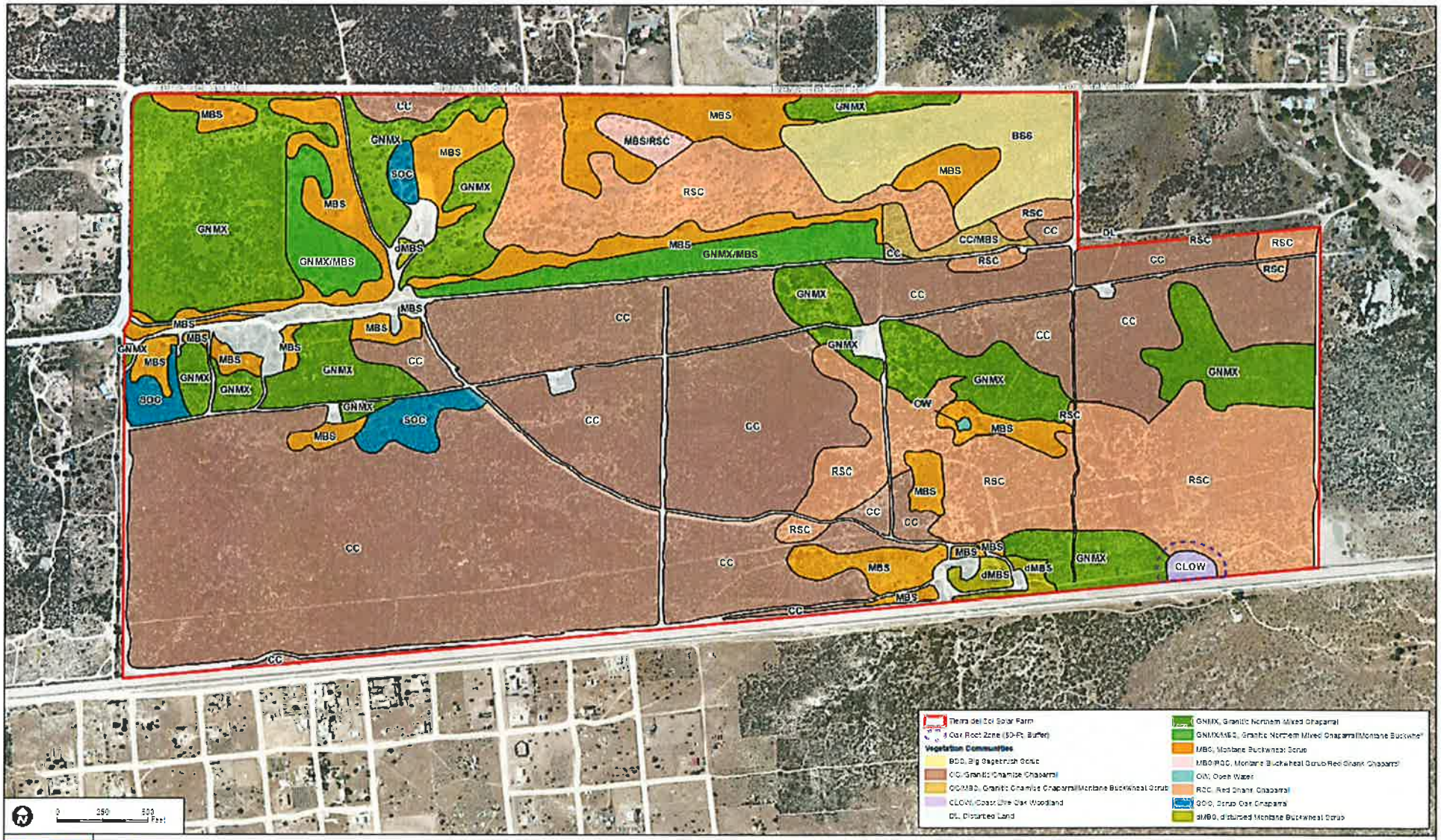
Biological Resources

- **Mitigation**
  - Offsite habitat preservation
  - Biological monitoring
  - Construction vehicle speed limits
  - Fugitive Dust Control Plan and Fire Protection Plan
  - Biological review of landscape plans
  - Restrictions on operation and maintenance personnel activity
  - Regulation of herbicide application
  - Preconstruction surveys for nesting birds
  - Monitoring of excavated areas and soil piles
  - Minimization of night lighting
  - Avian Power Line Interaction Committee Conformance
  - Federal and state permits
  - Implementation of a GMMP
  - Preparation of a Revegetation Plan

Biological Resources



CPV Overhead View



DUDEK

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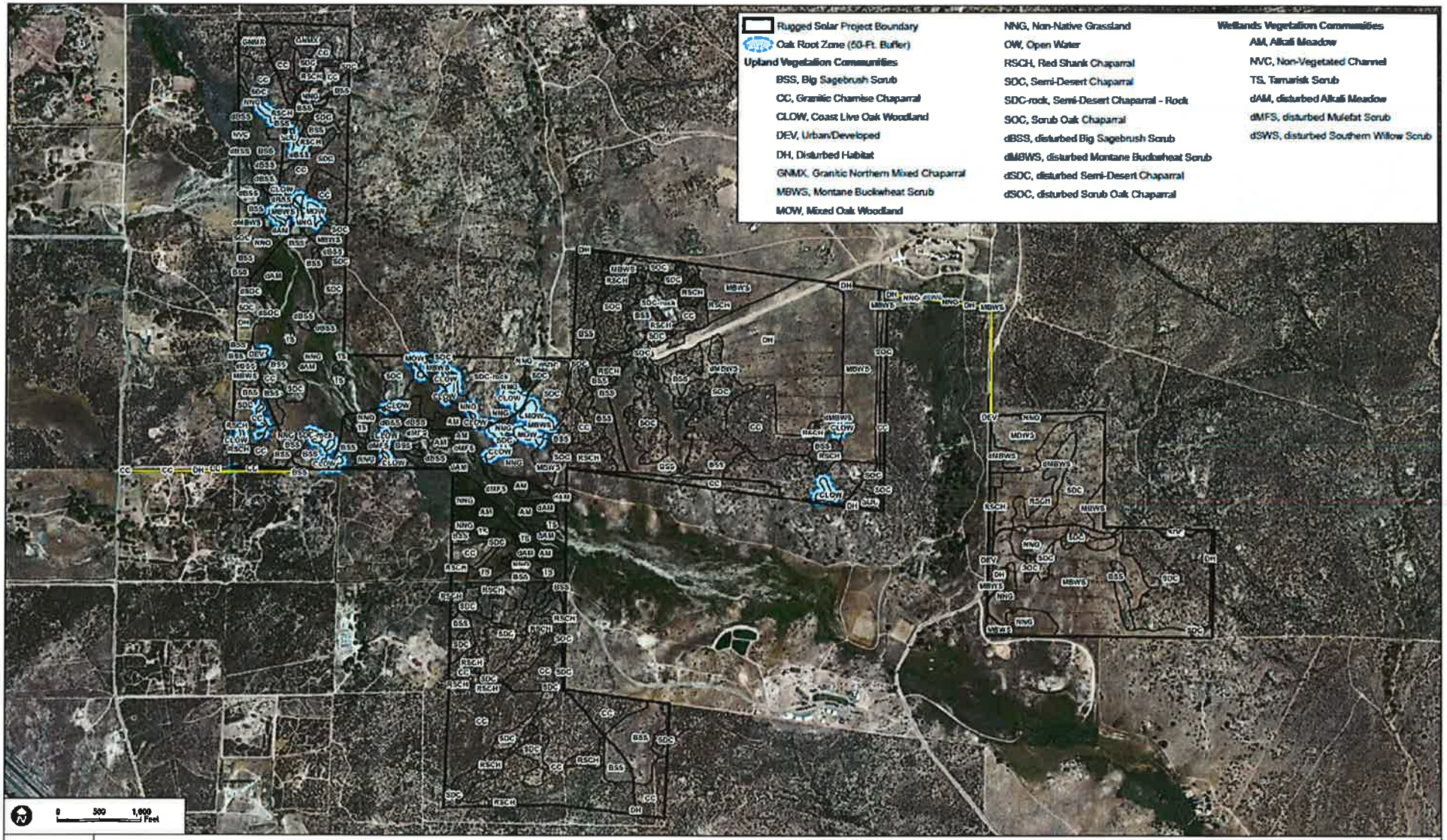
SOURCE: Bing Maps

FIGURE 2.3-1a

Biological Resources - Tierra del Sol Solar Farm Vegetation Communities

SCITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

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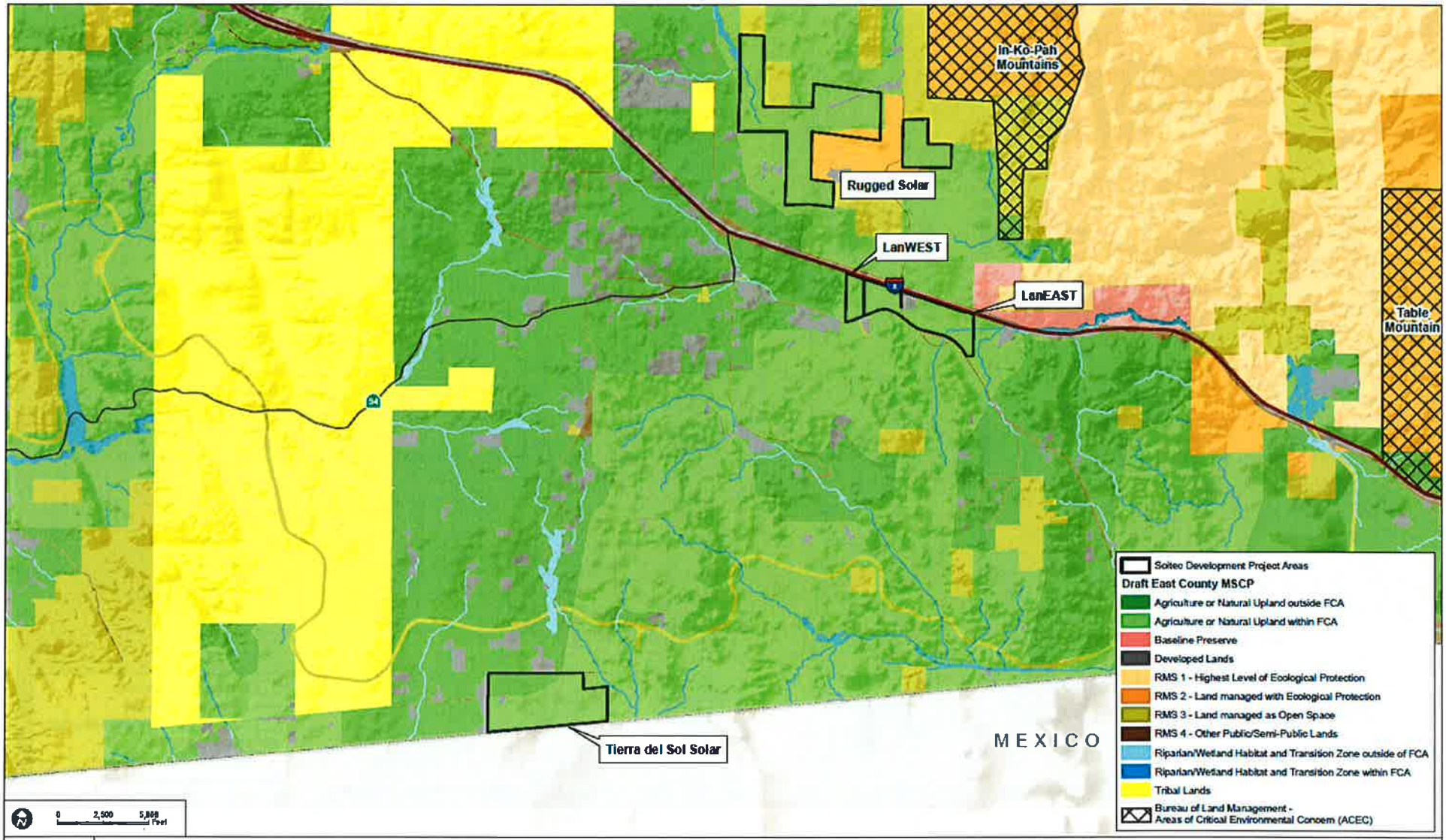
SOURCE: SanGIS 2012; Bing Maps

FIGURE 2.3-2

Rugged Solar Vegetation Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

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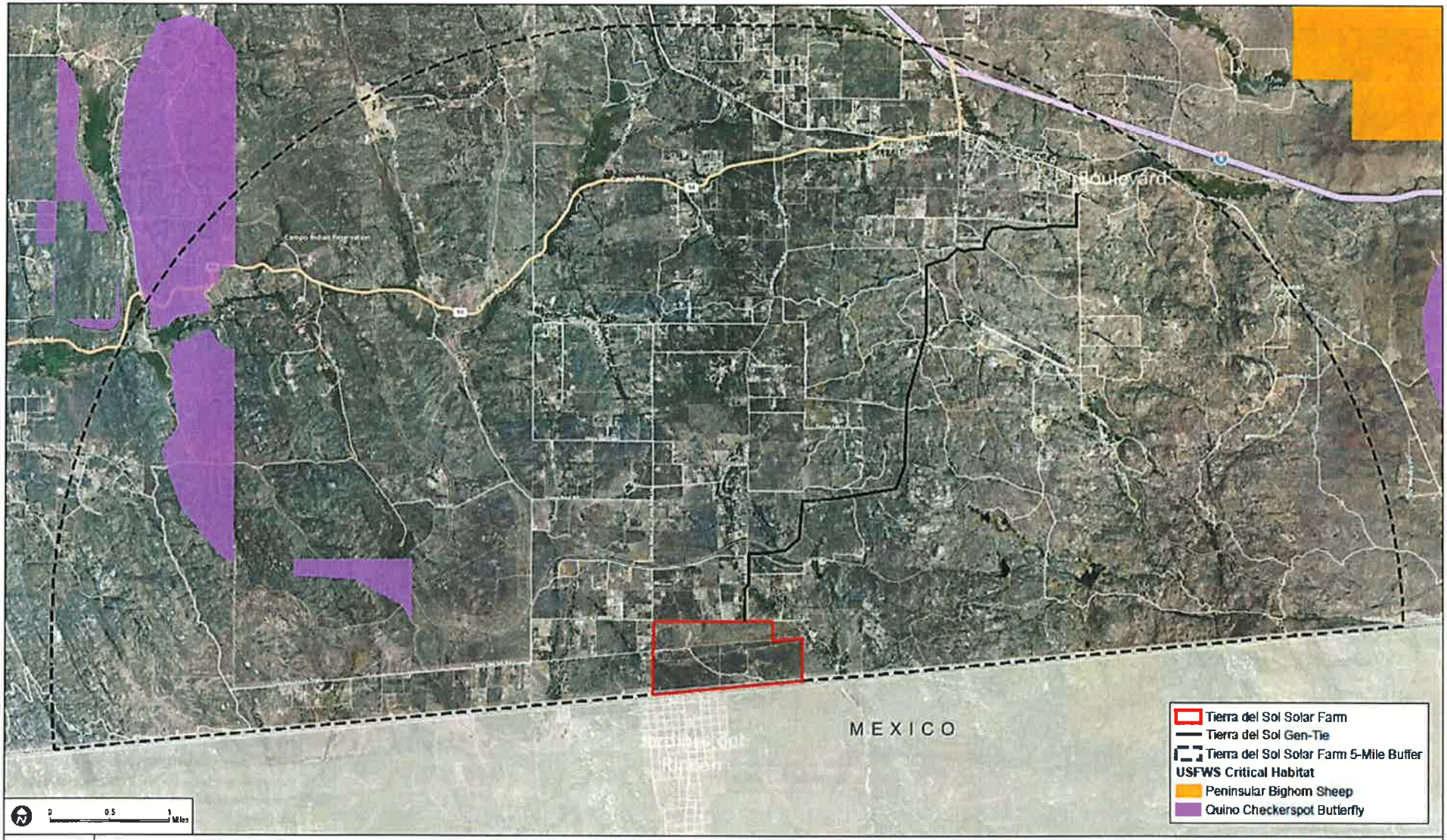
SOURCE: SanGIS 2012, BLM 2010

FIGURE 2.4-6

Regional Context Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

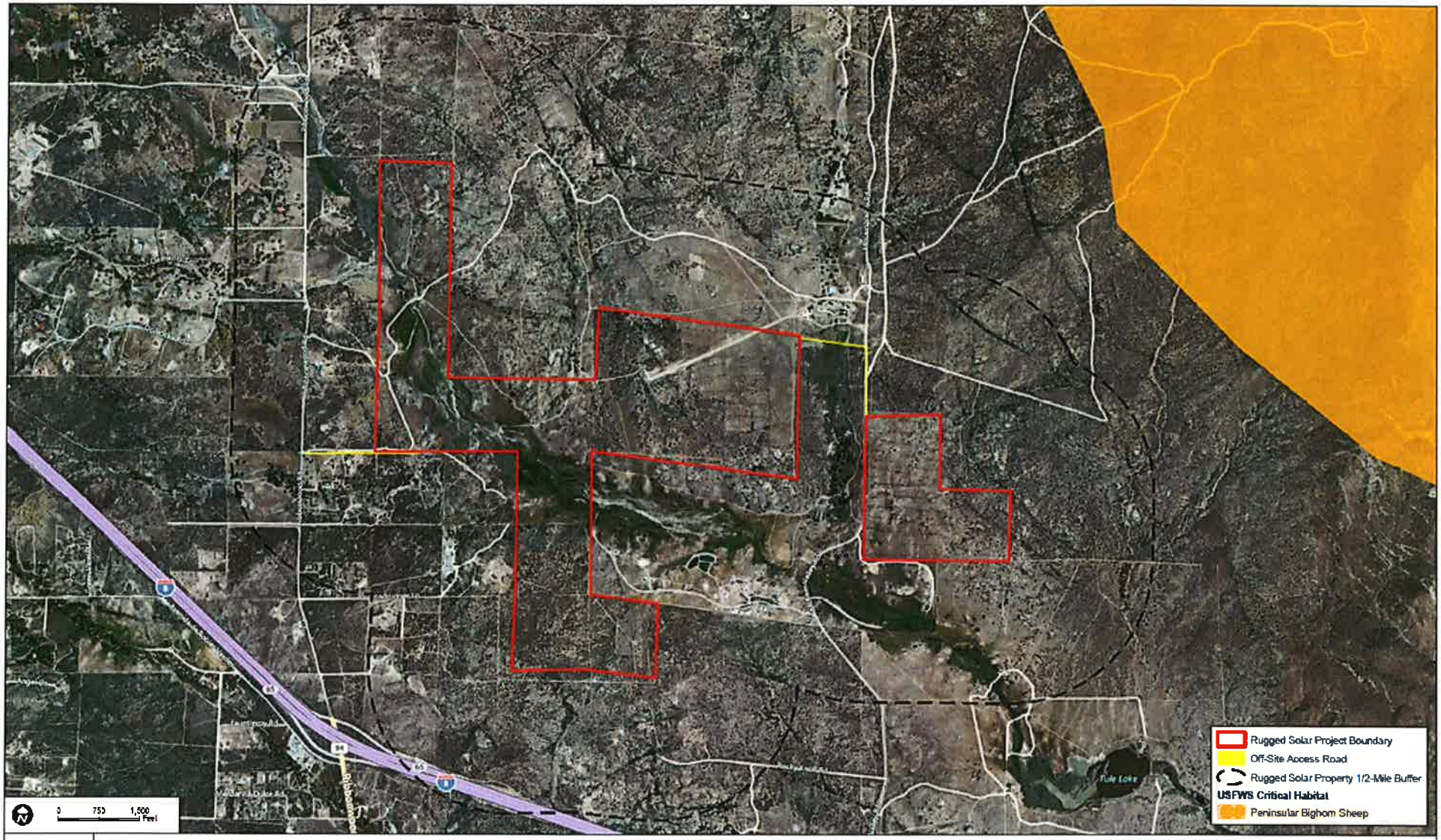
7345

SOURCE: USFWS 2012, Bing Maps

FIGURE 2.3-8

Tierra del Sol USFWS Critical Habitats Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

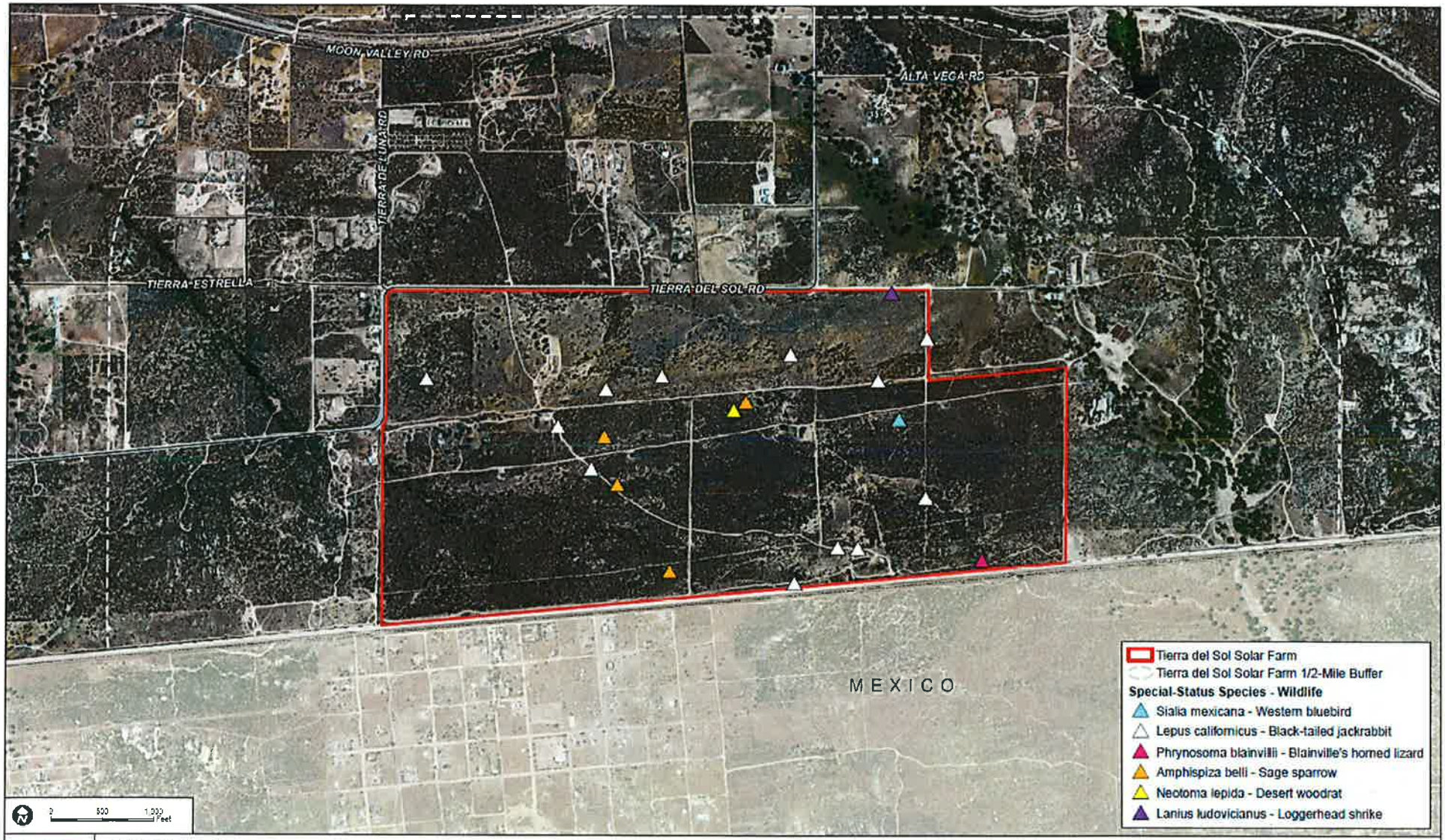
SOURCE: USFWS; ESRI GIS 2012; Bing Maps

7345

FIGURE 2.3-12

Rugged Solar USFWS Critical Habitat Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



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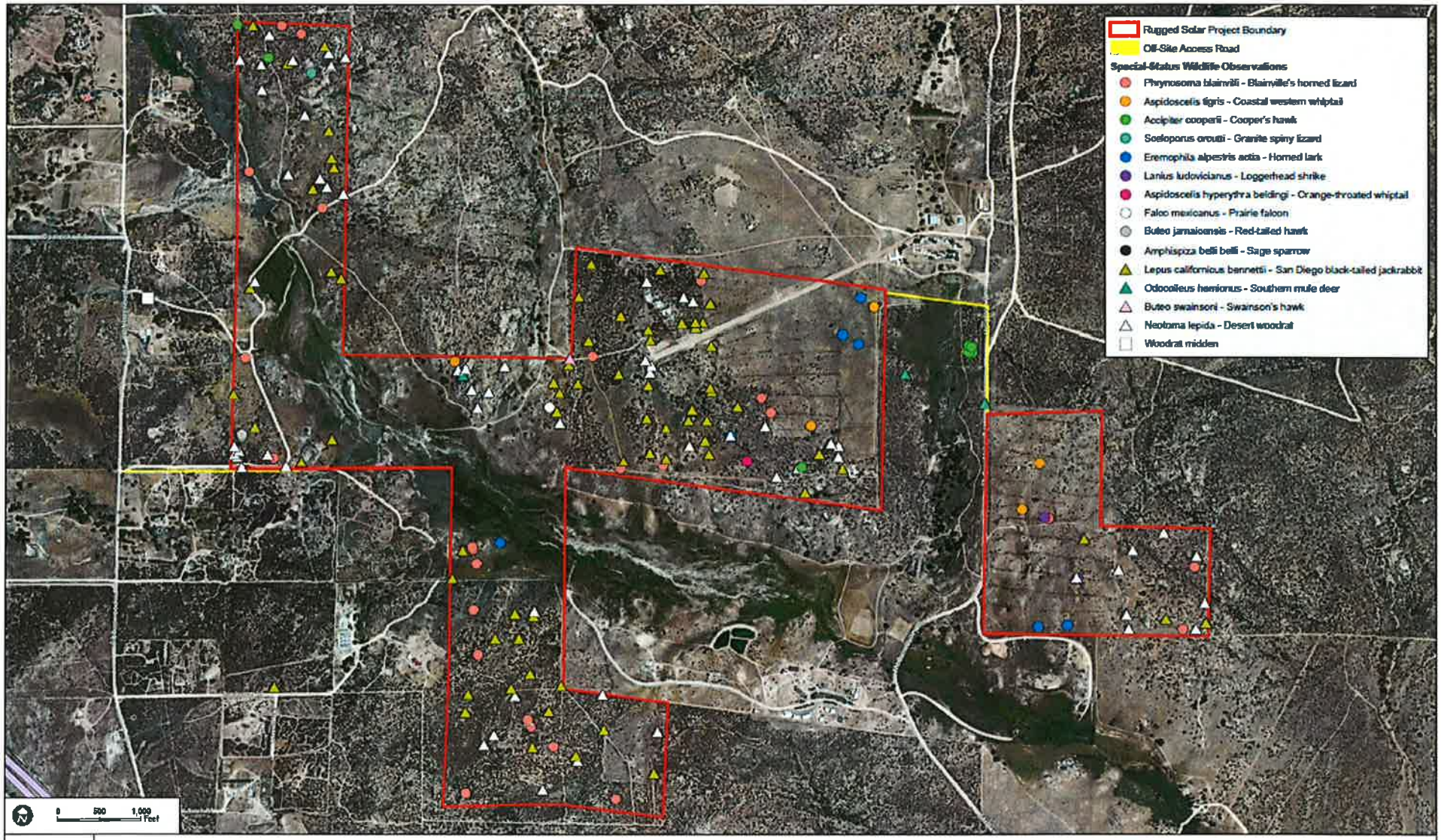
SOURCE: ESRI, 2012; Bing Maps

FIGURE 2.3-9

Tierra del Sol Special Status Wildlife Observations Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

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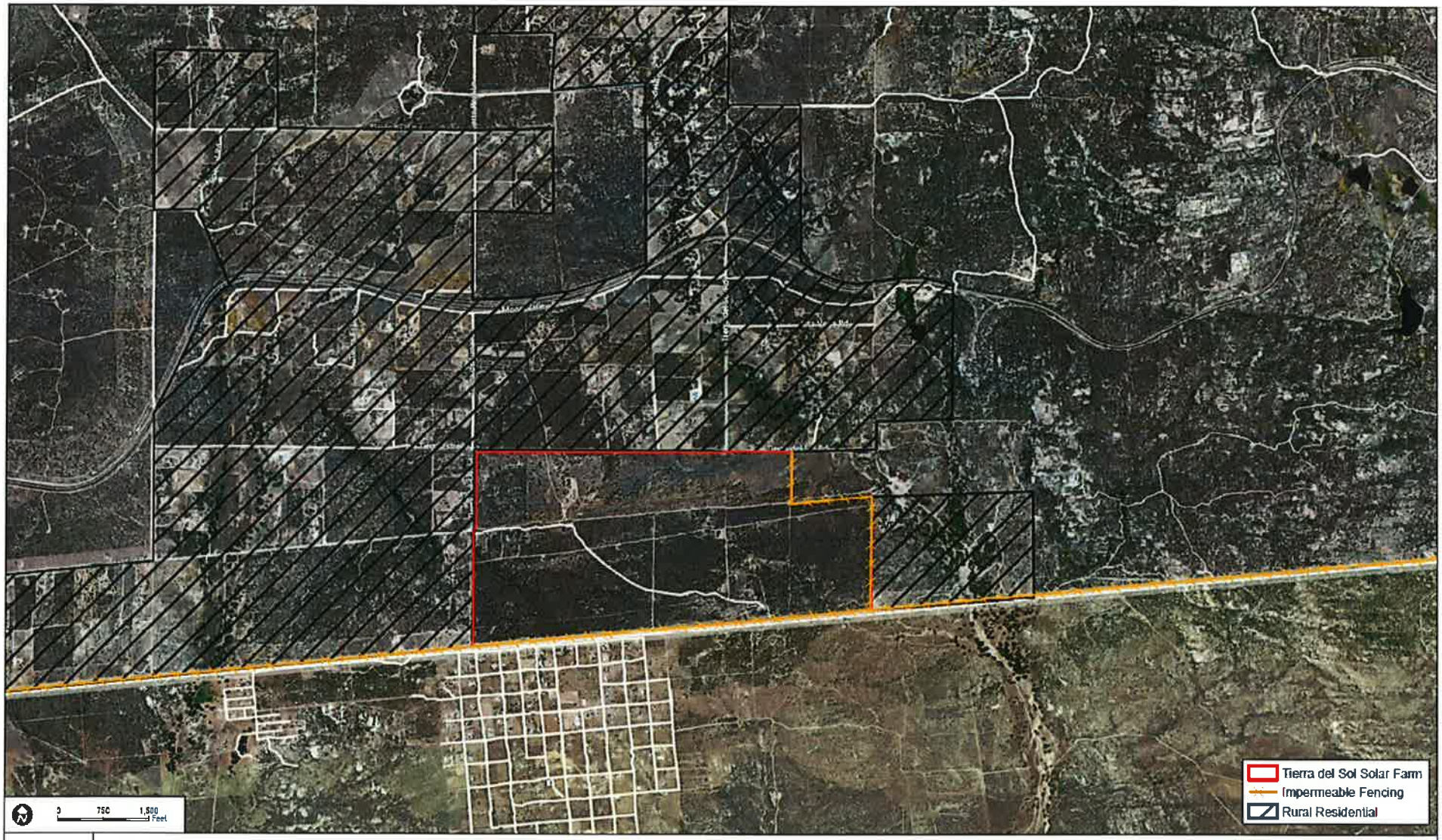
SOURCE: AECOM; CNDDB; SanGIS 2012; Bing Maps

FIGURE 2.3-13

Rugged Solar Wildlife Observations Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

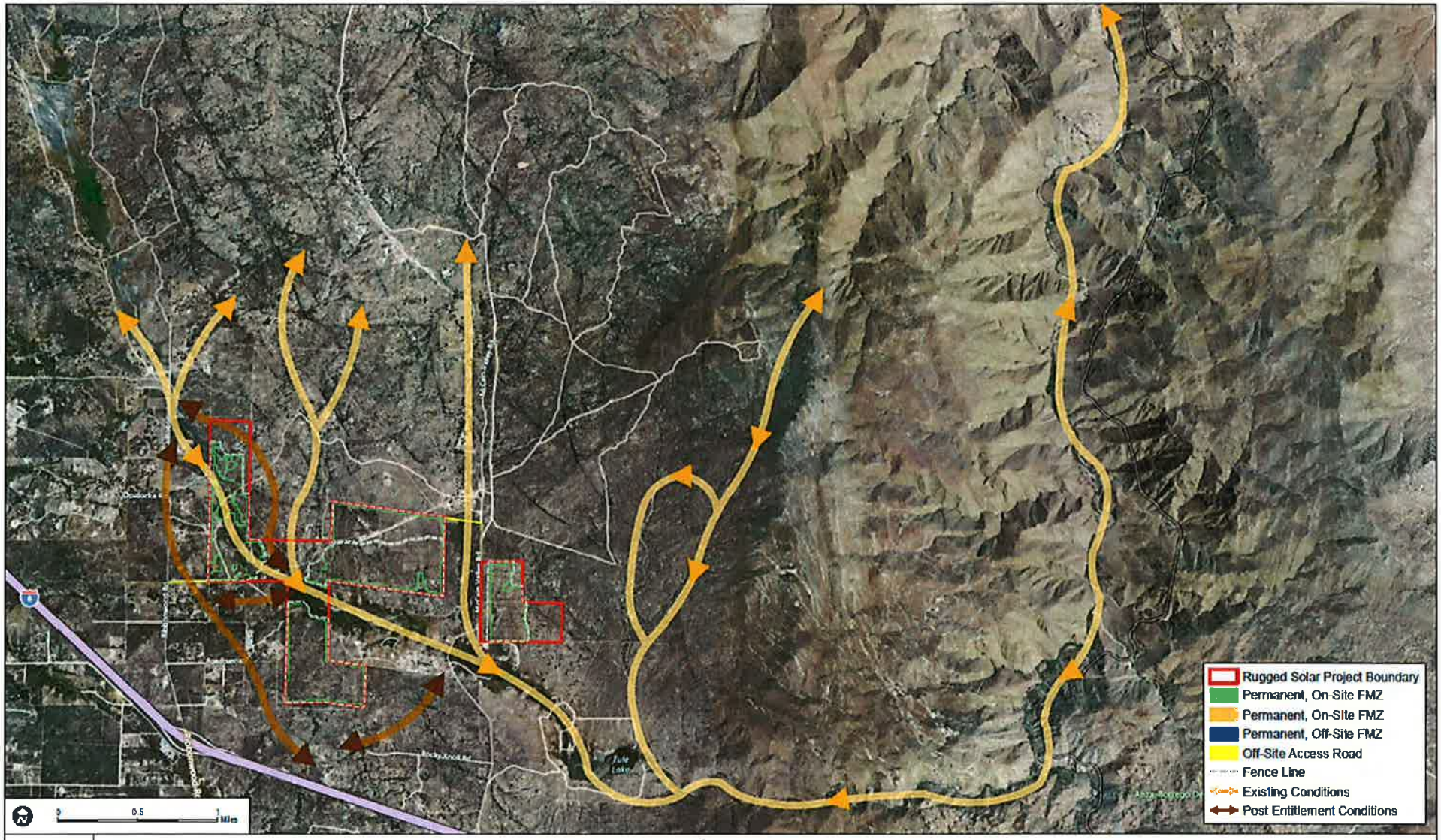
SOURCE: Bing Maps

7545

FIGURE 2.3-10

Tierra del Sol Wildlife Corridors and Habitat Linkages Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

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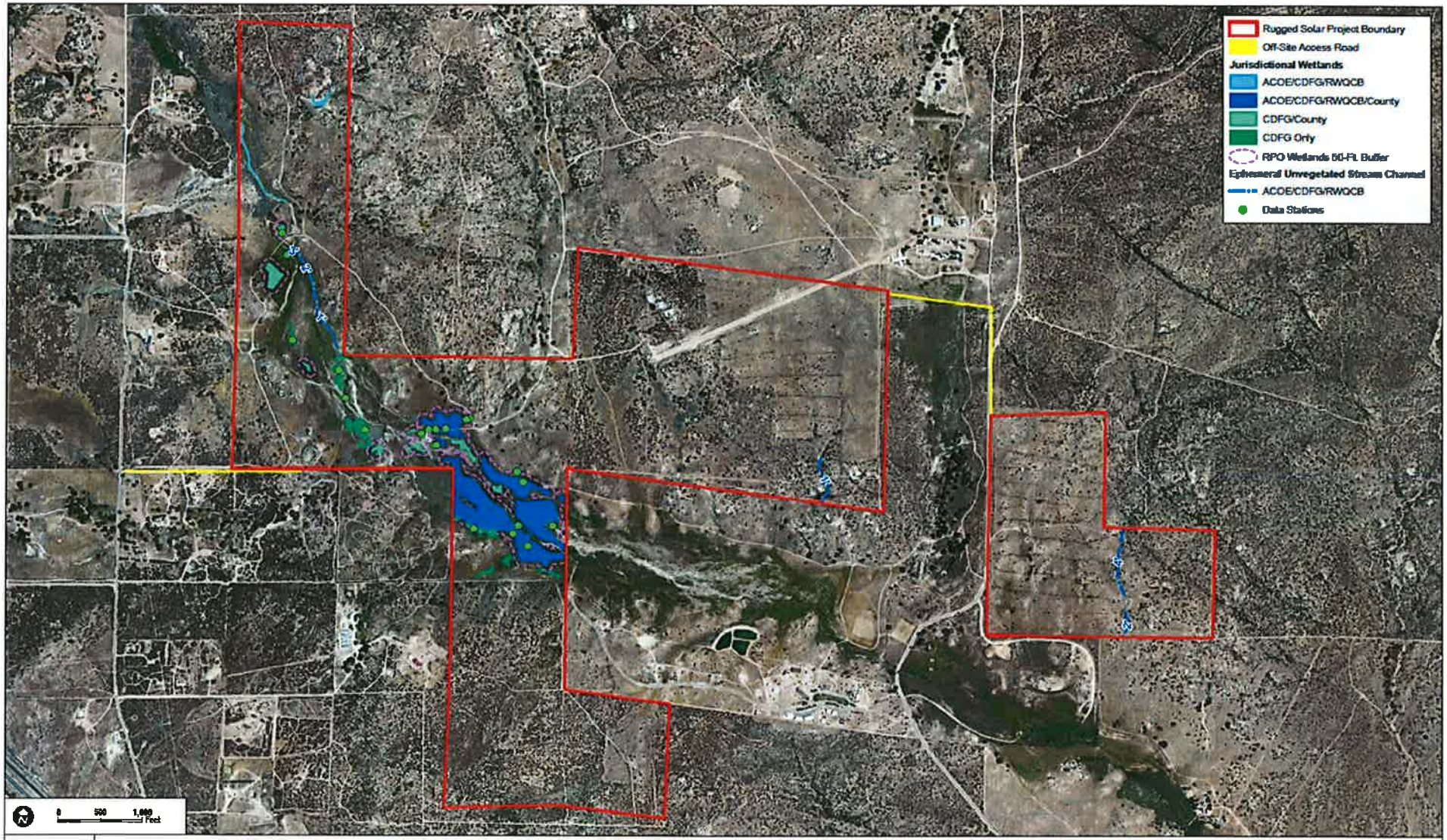
SOURCE: BingMaps

FIGURE 2.3-15

Rugged Solar Wildlife Corridors and Habitat Linkages Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

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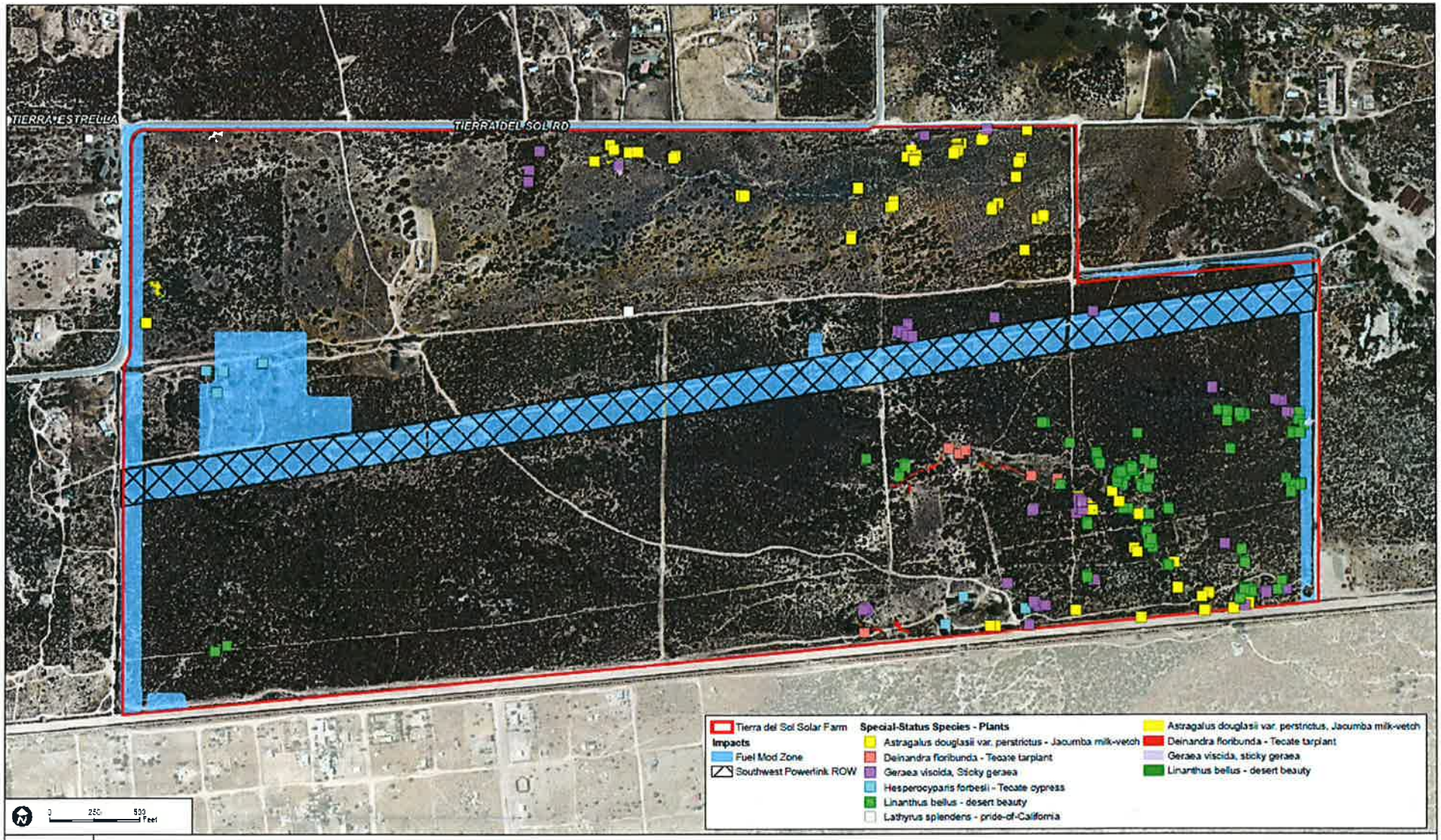
SOURCE: SanGIS 2012; Bing Maps

FIGURE 2.3-14

Rugged Solar Jurisdictional Delineation and RPO Lands Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

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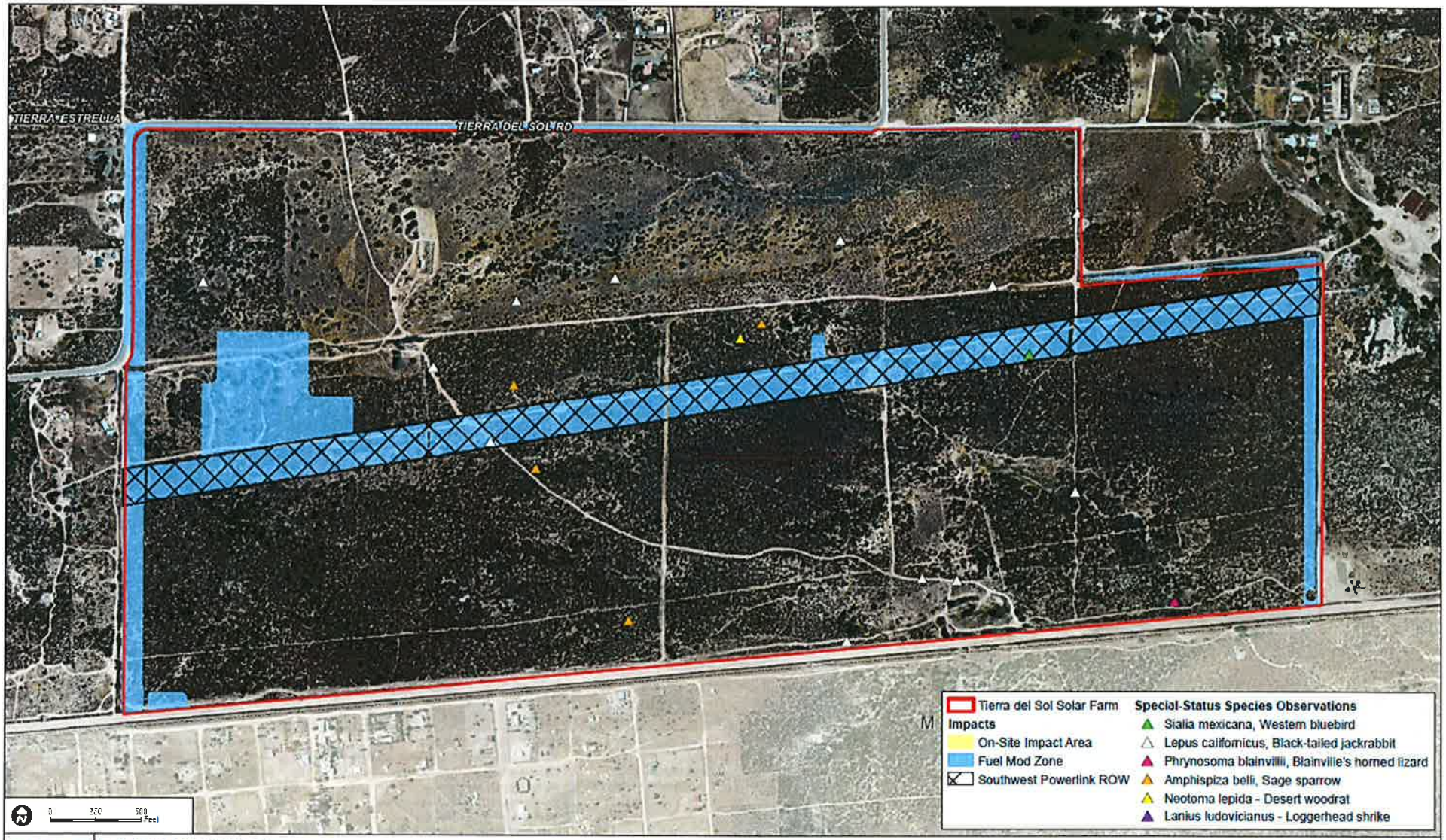
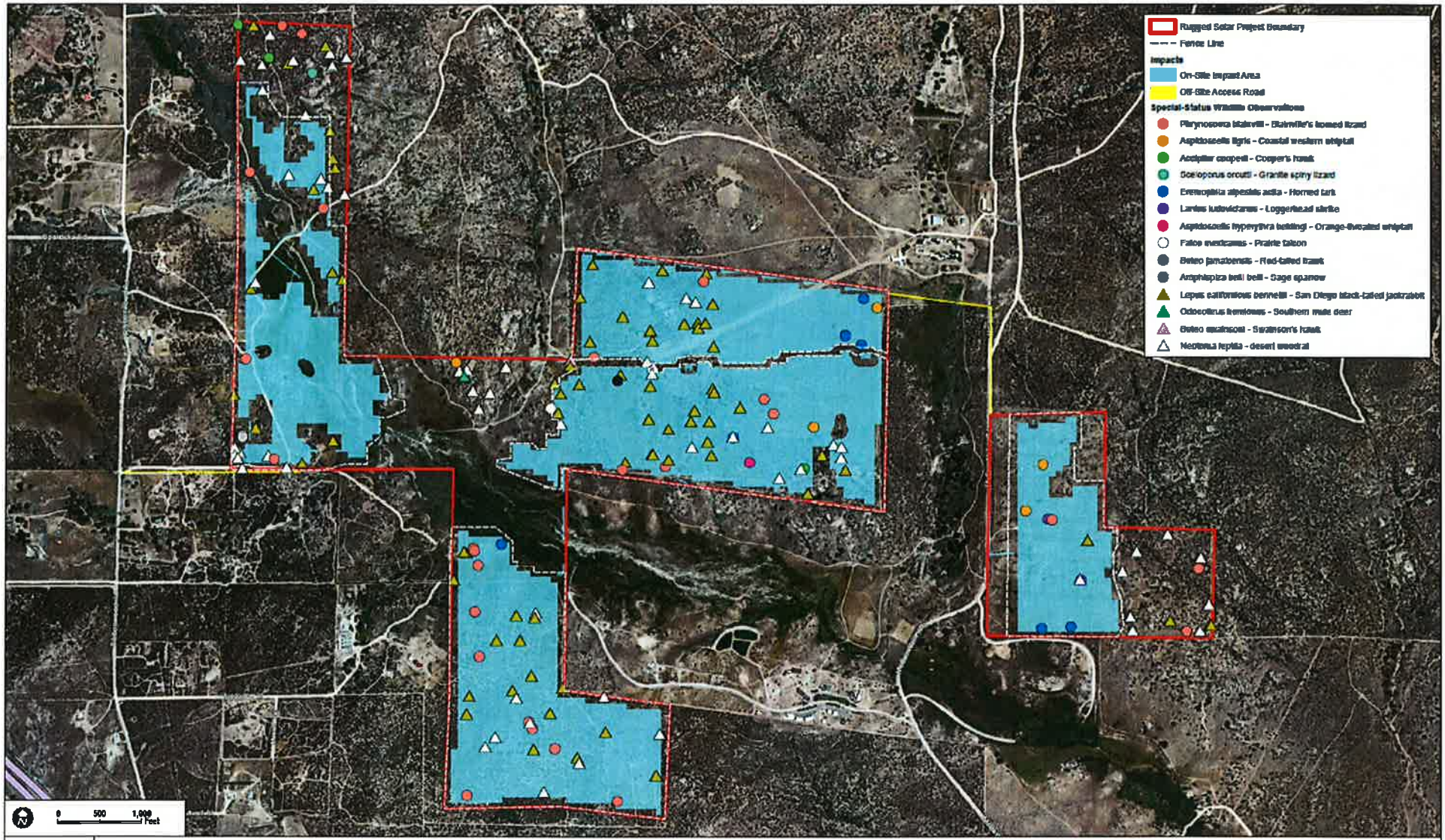
SOURCE: AECOM 2012, SOITEC 2012, Bing Maps

FIGURE 2.3-21

Tierra del Sol Solar Special-Status Plant Observations Impacts Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR


TIERRA ESTRELLA
TIERRA DEL SOL RD
Tierra del Sol Solar Farm
Impacts
On-Site Impact Area
Fuel Mod Zone
Southwest Powerlink ROW
Special-Status Species Observations
Sialia mexicana, Western bluebird
Lepus californicus, Black-tailed jackrabbit
Phrynosoma blainvillii, Blainville's horned lizard
Amphispiza belli, Sage sparrow
Neotoma lepida - Desert woodrat
Lanius ludovicianus - Loggerhead shrike
0 250 500 Feet
DUDEK
7045
SOURCE: AECOM 2012; SOITEC 2012; Bing Maps
FIGURE 2.3-22
Tierra del Sol Solar Special-Status Wildlife Observations Impacts Map
SOITEC SOLAR DEVELOPMENT PROGRAM EIR



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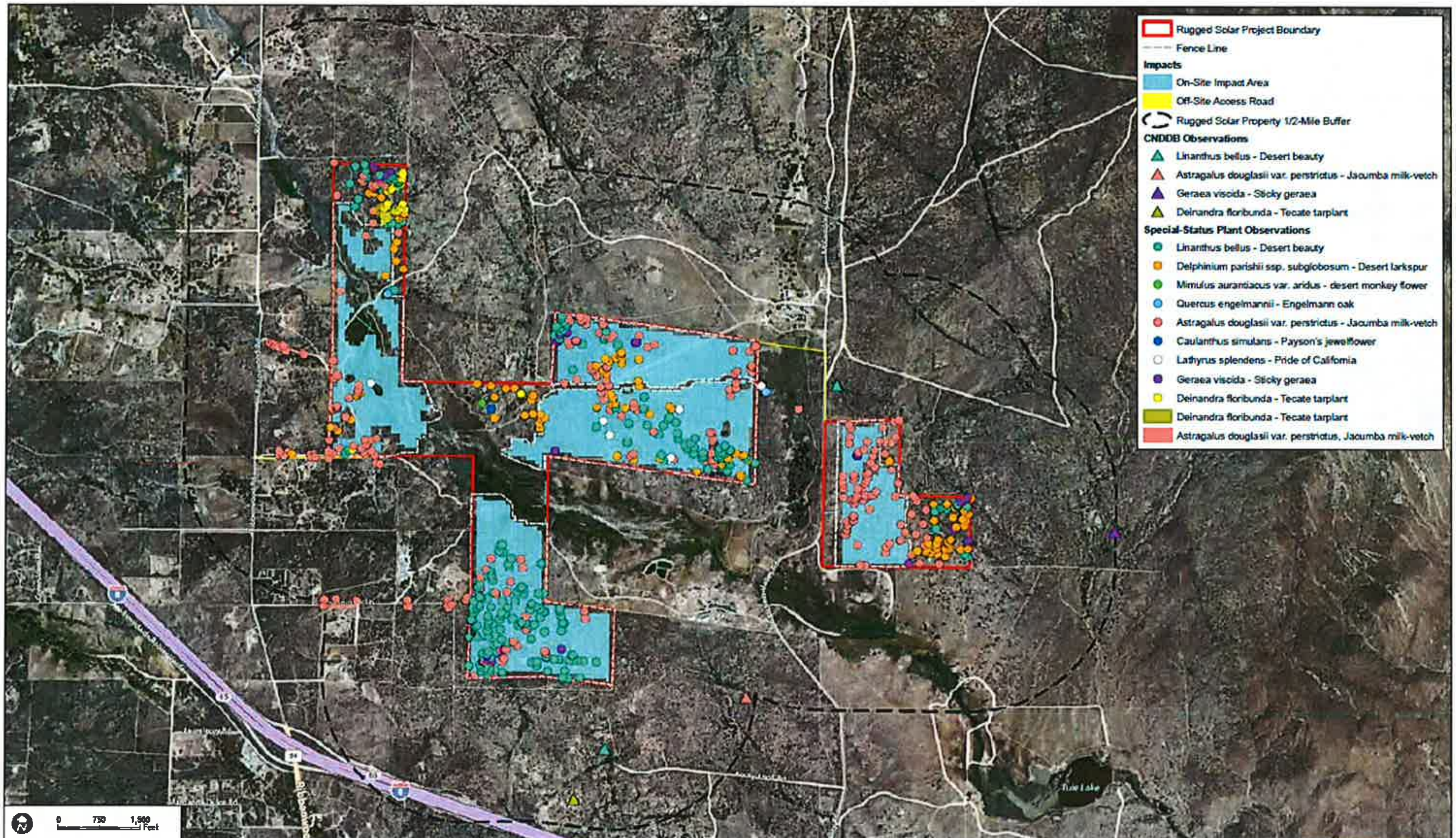
SOURCE: AECOM 2012; SanGIS 2012; Bing Maps

FIGURE 2.3-24

Rugged Solar Farm Special-Status Wildlife Observations Impacts Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



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SOURCE: AECOM 2012b; CNDDB 2012d; SanGIS 2012; Bing Maps

FIGURE 2.3-23

Rugged Solar Farm Special-Status Plant Observations Impacts Map

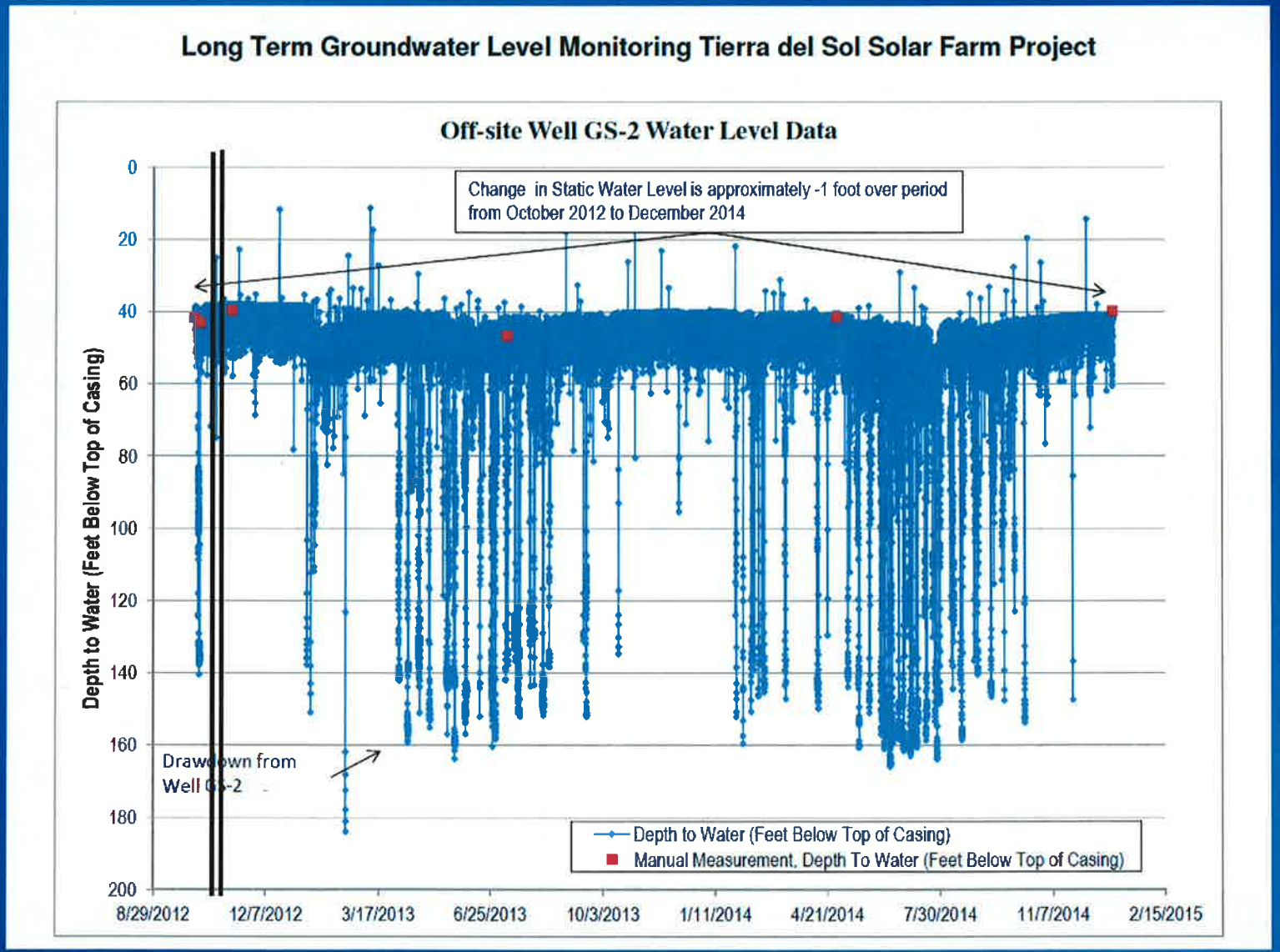
SOITEC SOLAR DEVELOPMENT PROGRAM EIR

GROUNDWATER

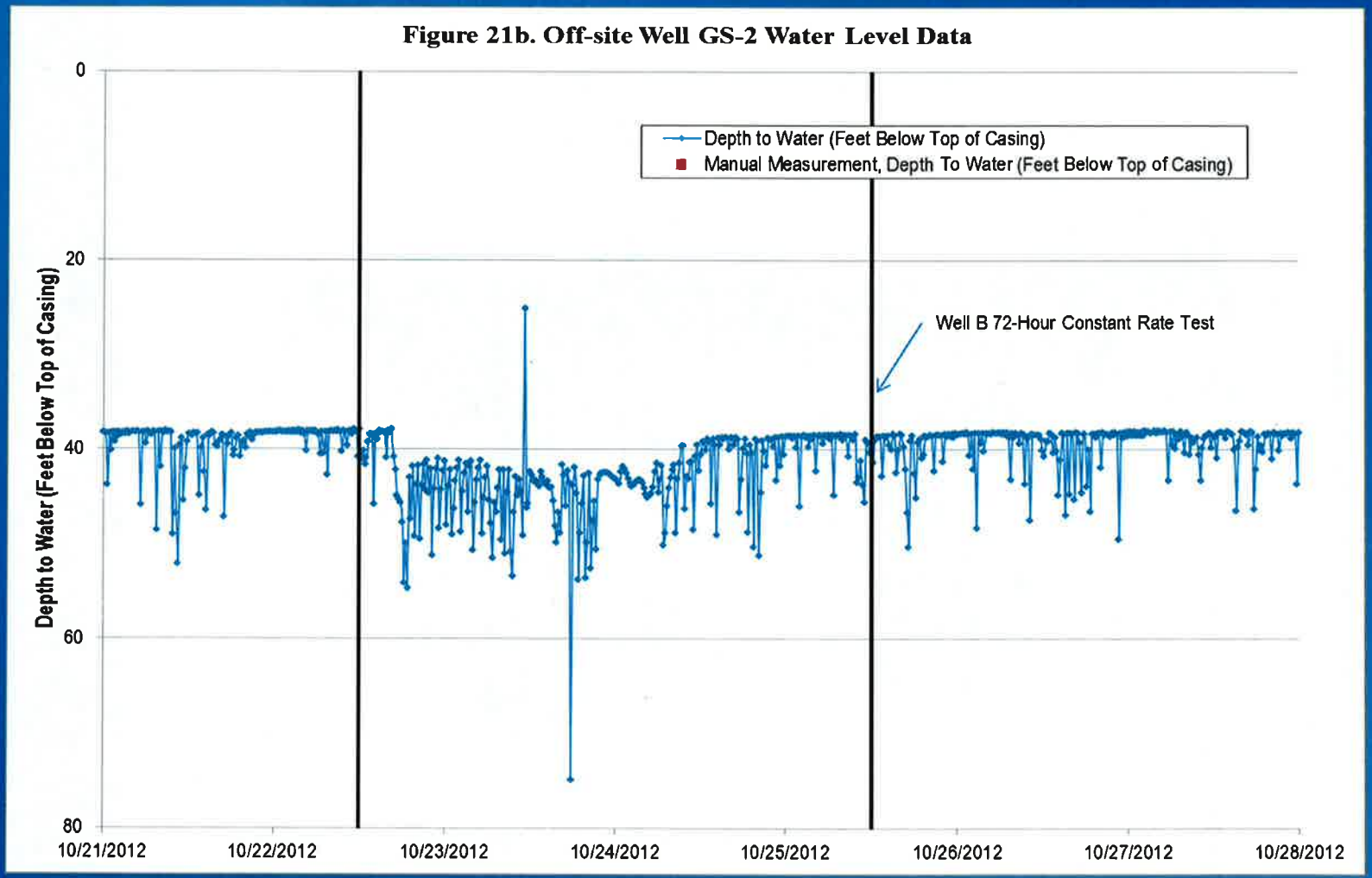
Proposed Groundwater Sites Construction Phase

	Tierra Del Sol	Rugged
On-Site Water	26%	65%
Jacumba CSD	31%	Up to 32.5%
Pine Valley MWD	0%	Up to 19%
Padre Dam MWD	43%	0%

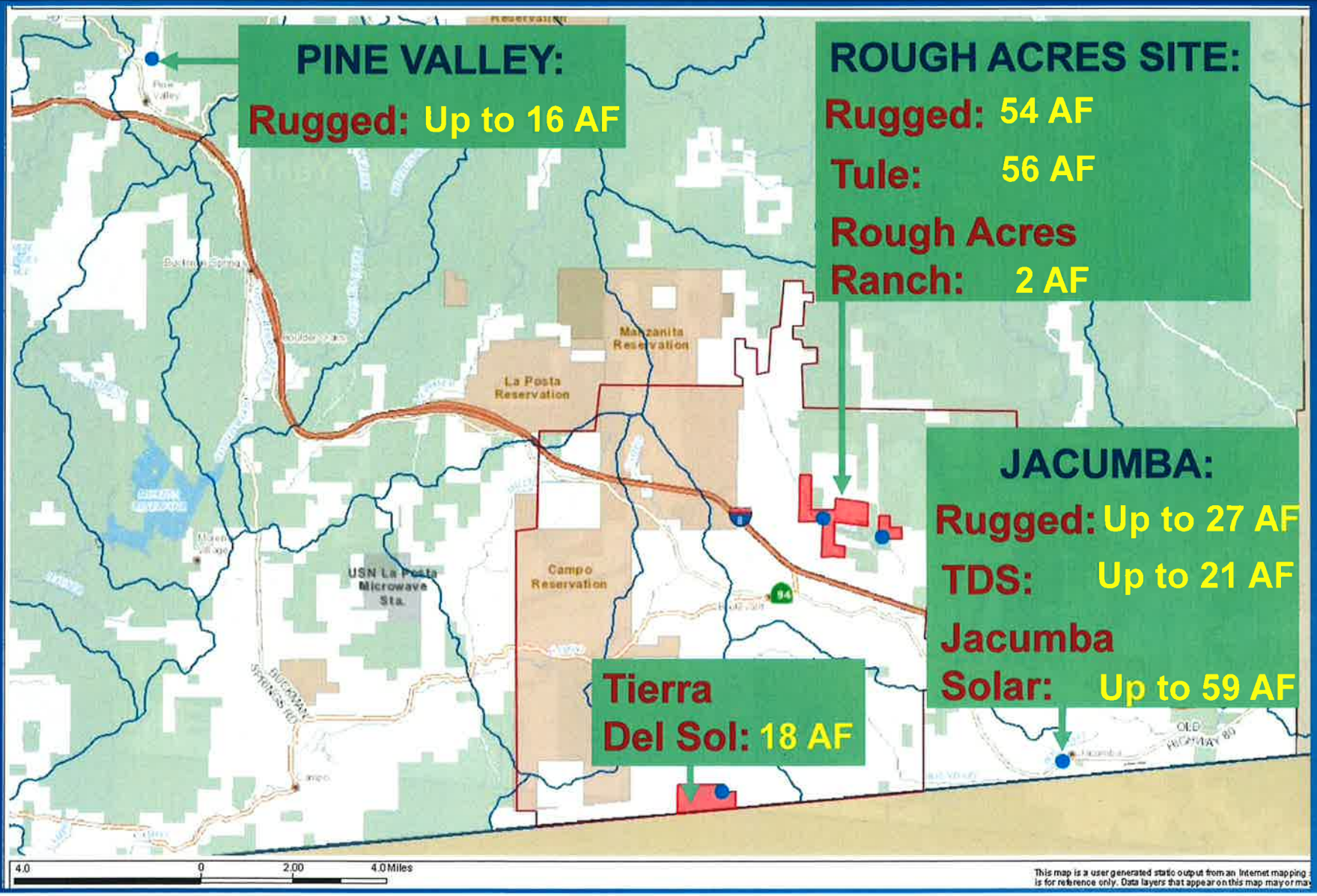
Tierra Del Sol Offsite Well GS-2 Well Hydrograph



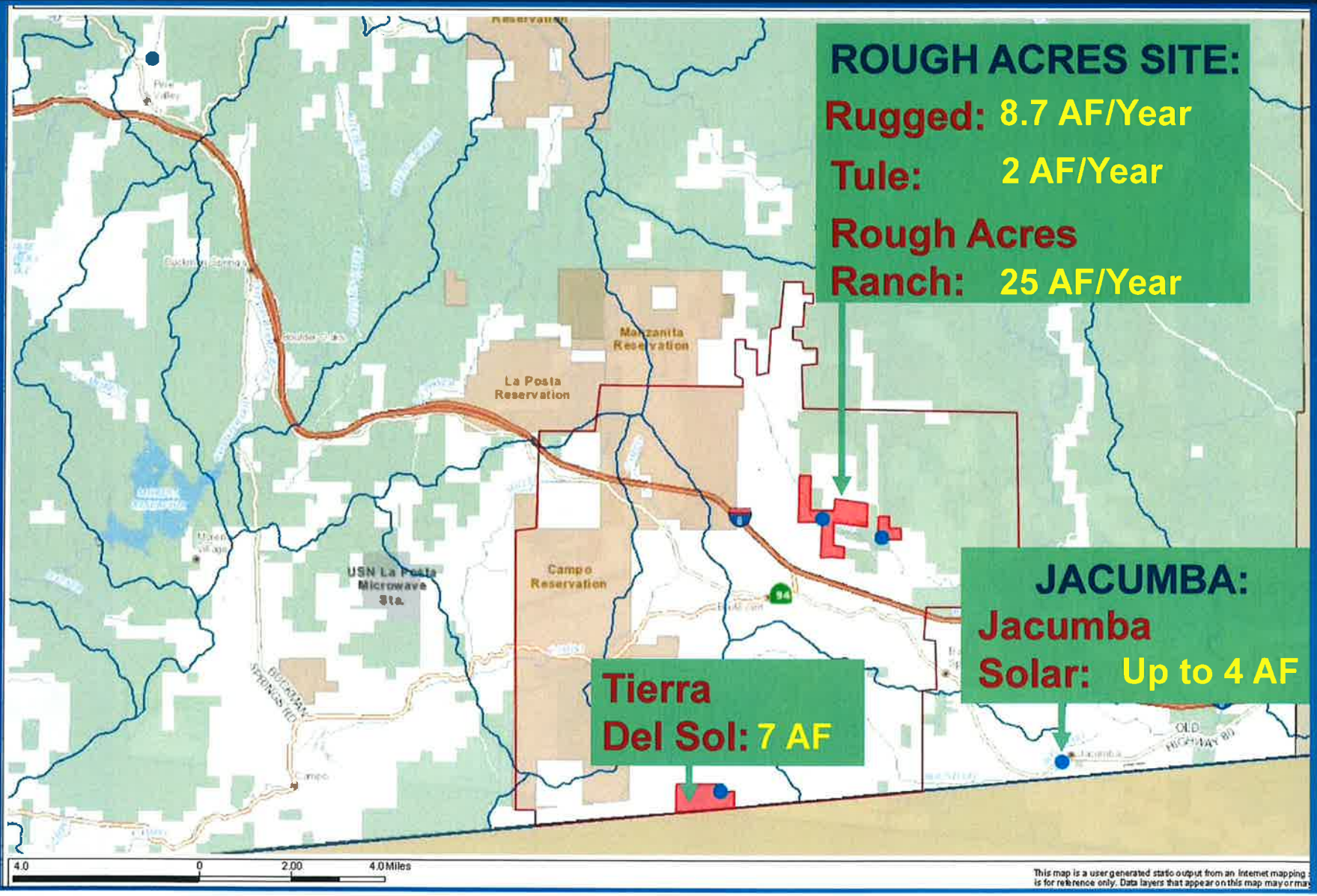
Tierra Del Sol Offsite Well GS-2 Well Hydrograph



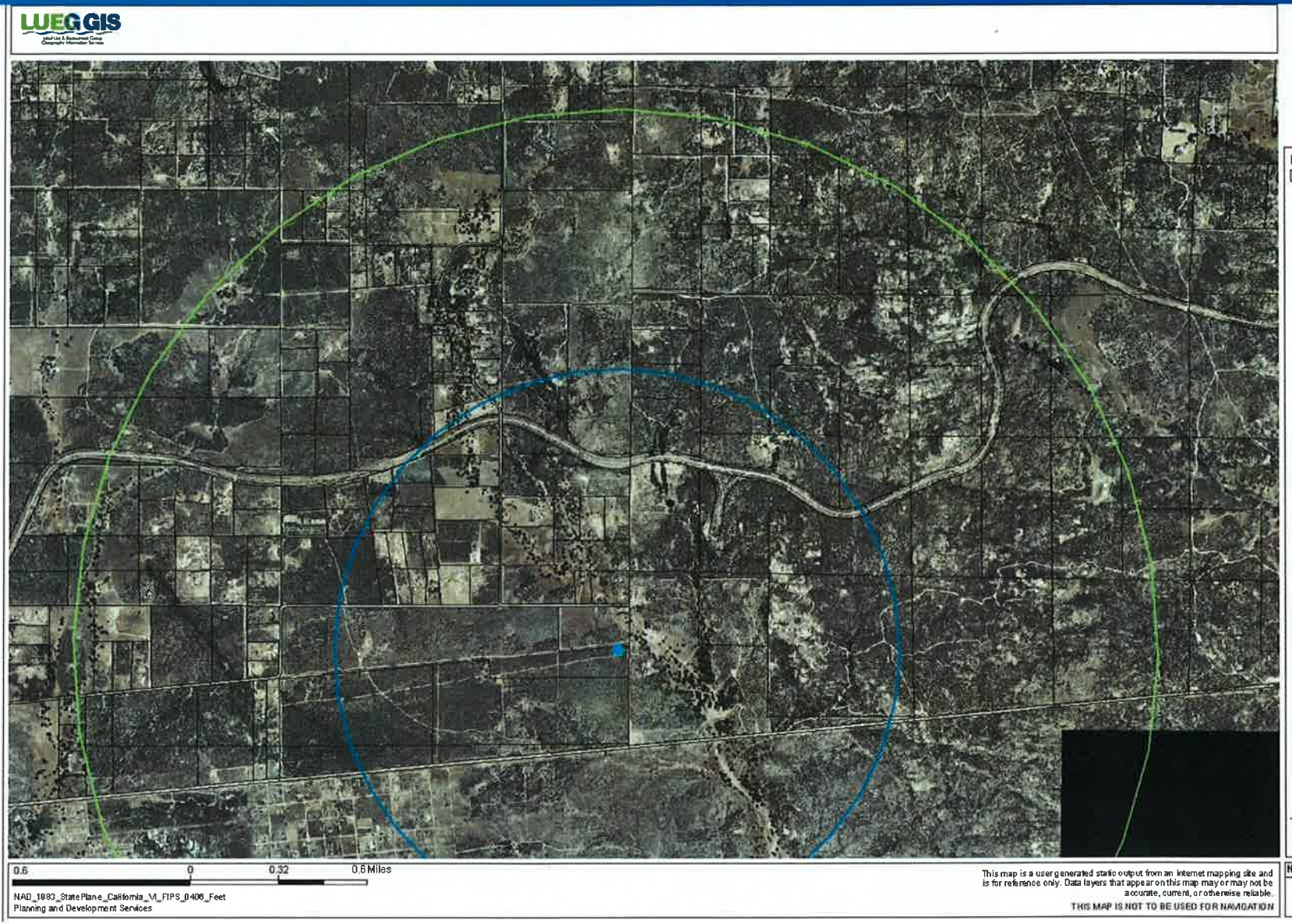
Reasonably Foreseeable Projects Construction Phase



Reasonably Foreseeable Projects Ongoing Water Use



Tierra Del Sol Solar Farm
One Mile/Two Mile Radius



Tierra Del Sol Solar Farm Groundwater Investigation

Groundwater Monitoring and Mitigation Plan:

Construction Demand Limitations: 18 AF total, 7 AF first 90 days
Ongoing Demand Limitation: 7 AF maximum per year

Groundwater Level Thresholds (first five years):
10 feet for wells in groundwater dependent habitat
20 feet all other offsite wells

Groundwater Monitoring: 6 on-site wells and 11 off-site wells

Groundwater Dependent Habitat Monitoring: 72 monitoring plots

Groundwater Reporting to County:
First 90 Days – once every two weeks
Remainder of Construction Period – once a month
Ongoing Water Use: annual reporting

Rugged Solar Farm Groundwater Investigation

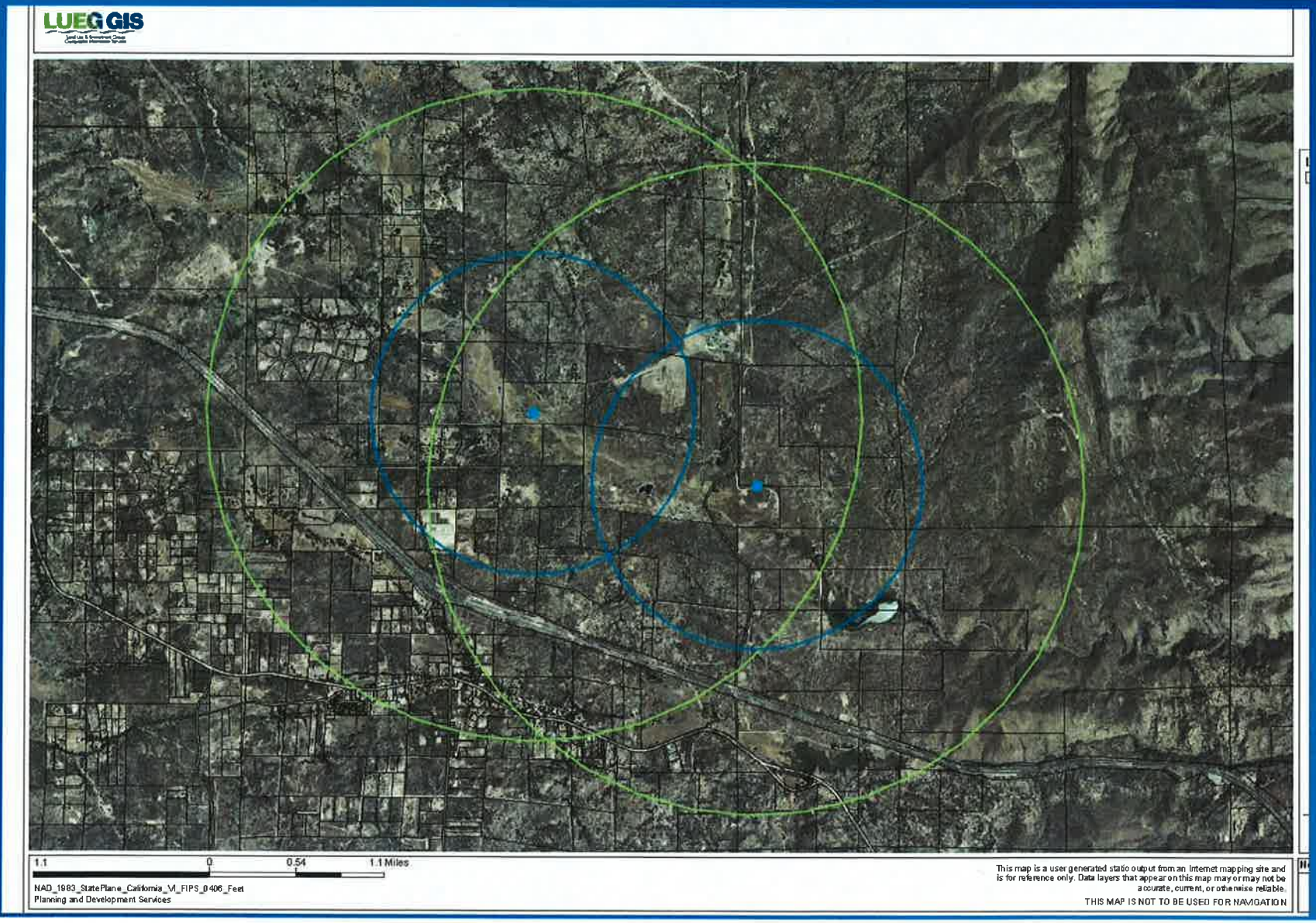
Construction Water Required:

Rugged:	54 AF
Tule (Approved):	56 AF
Rough Acres Ranch (Not Approved): :	2 AF

Ongoing Water Required:

Rugged:	8.7 AF/Year
Tule:	2 AF/Year
Rough Acres Ranch:	25 AF/Year

Rugged Solar Farm
One Mile/Two Mile Radius



Rugged Solar Farm Groundwater Investigation

Groundwater Monitoring and Mitigation Plan:

Construction Demand Limitations: 54 AF total

Ongoing Demand Limitation: 8.7 AF maximum per year

Groundwater Level Thresholds (first five years):
10 feet for wells in groundwater dependent habitat and offsite wells

Groundwater Monitoring: 8 on-site wells and up to 9 off-site wells

Groundwater Dependent Habitat Monitoring: 38 monitoring plots

Groundwater Reporting to County:
First 90 Days – once every two weeks
Remainder of Construction Period – once a month
Ongoing Water Use: annual reporting

Jacumba Community Services District Groundwater Investigation

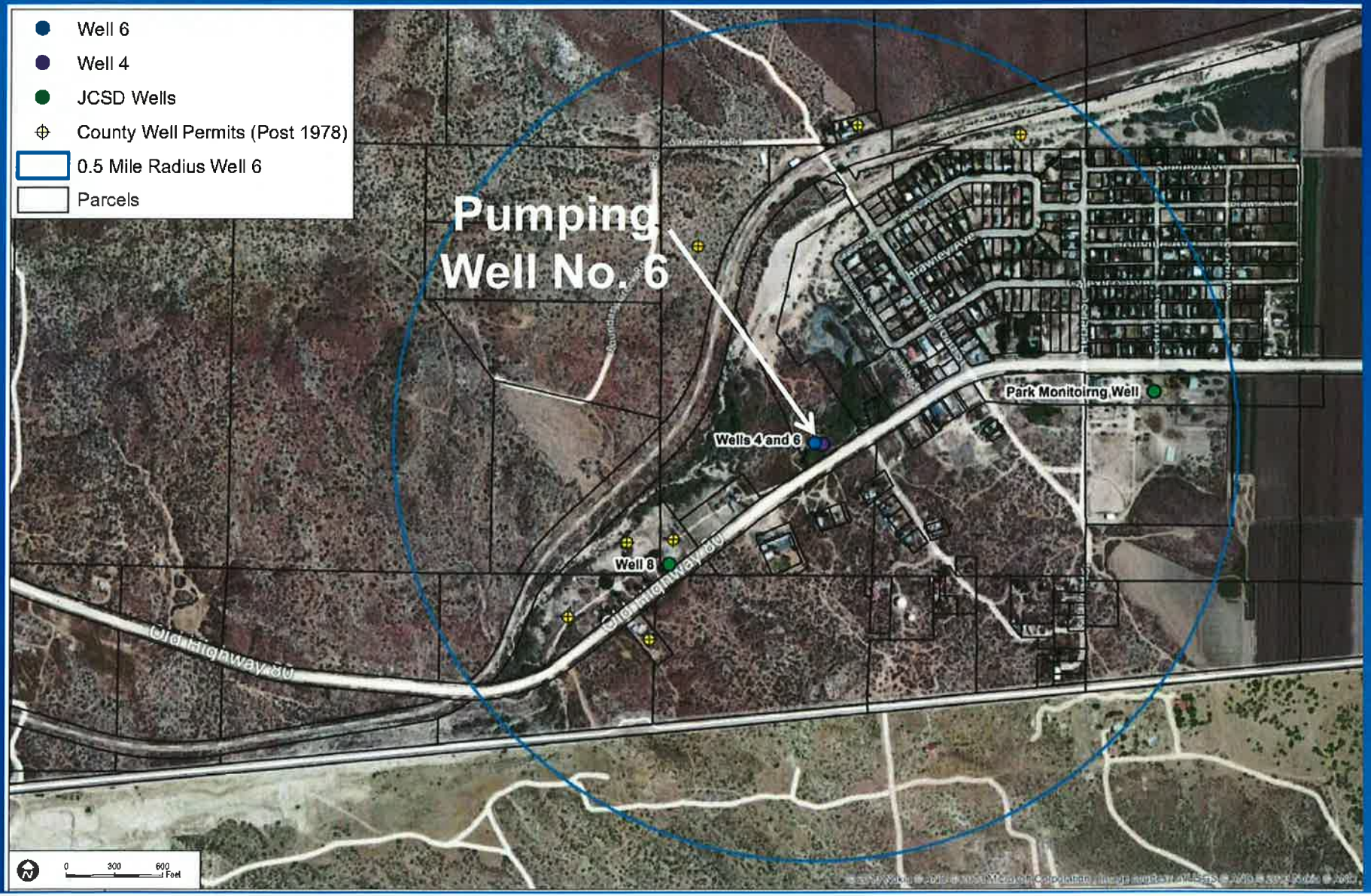
Construction Water Requested:
Up to 48 Acre-Feet (15.6 million gallons)

- Up to 21 Acre-Feet for Tierra Del Sol Solar
- Up to 27 Acre-Feet for Rugged Solar Project

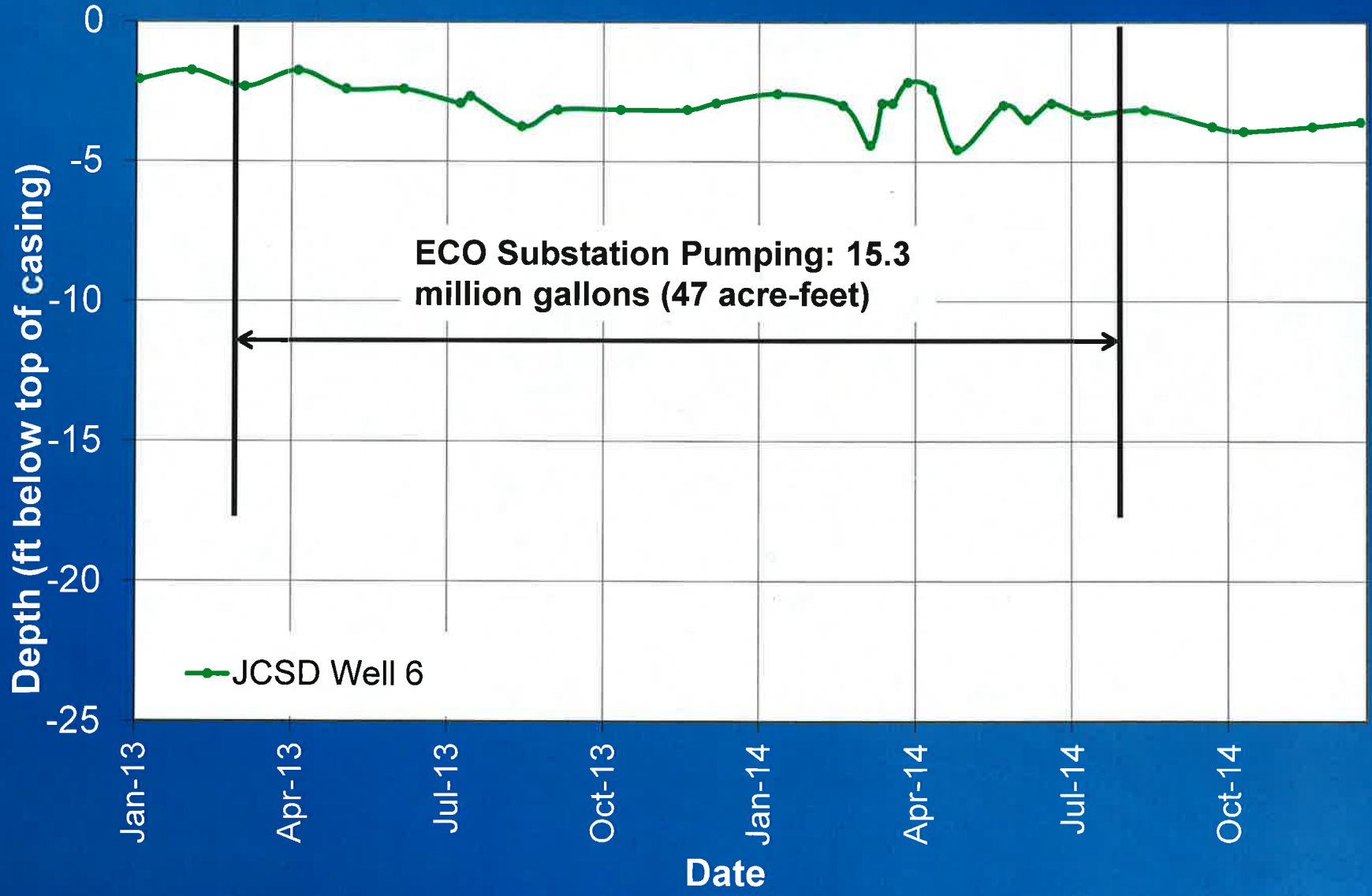
Jacumba Solar (Not Approved) Construction Water Required: Up to 59 Acre-Feet

Jacumba Solar (Not Approved) Ongoing Water Required:
Up to 4 Acre-Feet

Jacumba Community Services District Groundwater Investigation



Jacumba Community Services District Groundwater Investigation



Jacumba Community Services District Groundwater Investigation

Groundwater Monitoring and Mitigation Plan:

Construction Demand Limitations: Up to 21 AF, Tierra Del Sol Project, Up to 27 AF, Rugged Solar Project

Groundwater Level Thresholds (first five years):
5 feet for 4 closest JCSD wells and any offsite wells monitored

Groundwater Monitoring: 5 JCSD wells

Groundwater Dependent Habitat Monitoring: Only required if water levels drop below historical low water levels in Well No. 4

Groundwater Reporting to County: Monthly Reporting

Pine Valley Mutual Company Groundwater Investigation

Well Inventory

- Wells
- DEH-Permitted Supply Wells
- Communities
- Freeways
- Major Highways
- Roads
- Watershed Boundary
- Rivers
- Ocean/Lakes

0 0.25 0.5
Miles

May 2009
k:\groundwater\pine_valley\maps\wells mxd

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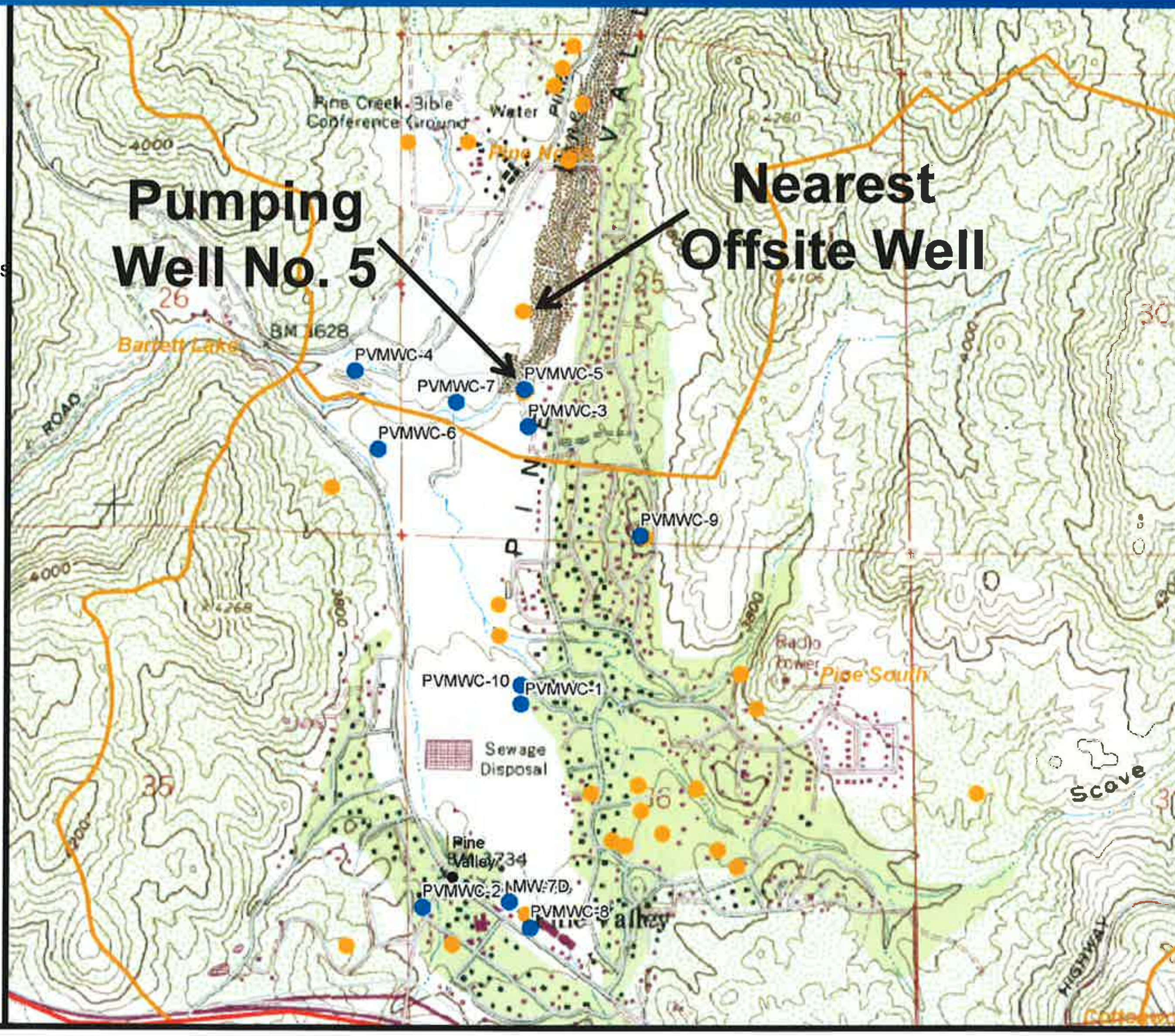


Pine Valley Mutual Water Company Groundwater Investigation

Groundwater Monitoring and Mitigation Plan:

Construction Demand Limitations: 16 AF total, for Rugged Solar Only

Groundwater Level Thresholds (first five years):
10 feet for two closest PVMWC wells and any offsite wells monitored

Groundwater Monitoring: 3 PVMWC wells and volunteer off-site wells

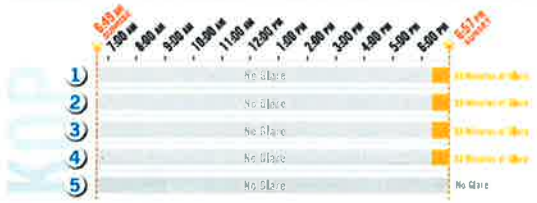
Groundwater Dependent Habitat Monitoring: 9 monitoring plots

Groundwater Reporting to County: Monthly Reporting

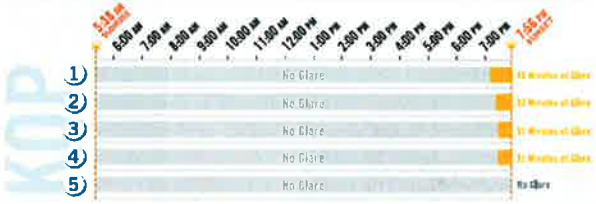
VISUAL RESOURCES

Aesthetics- Glare

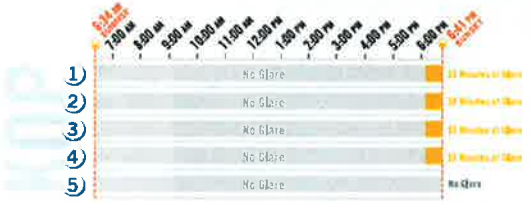
SPRING



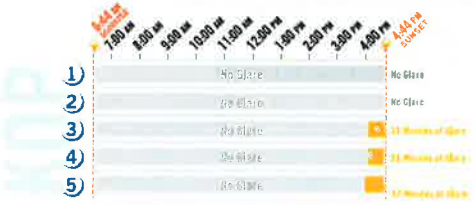
SUMMER



FALL



WINTER



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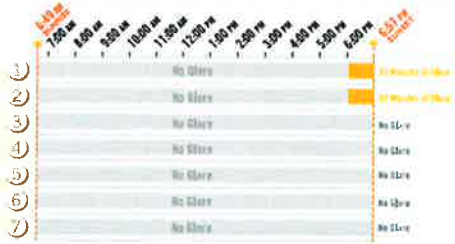
POWER ENGINEERS

GLARE BEHAVIORAL ANALYSIS

Rugged Solar Results

Aesthetics- Glare

SPRING



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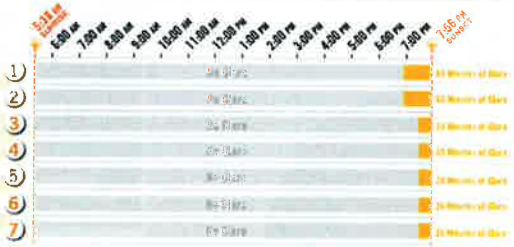
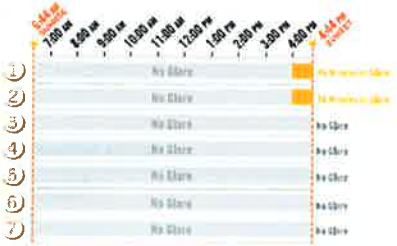
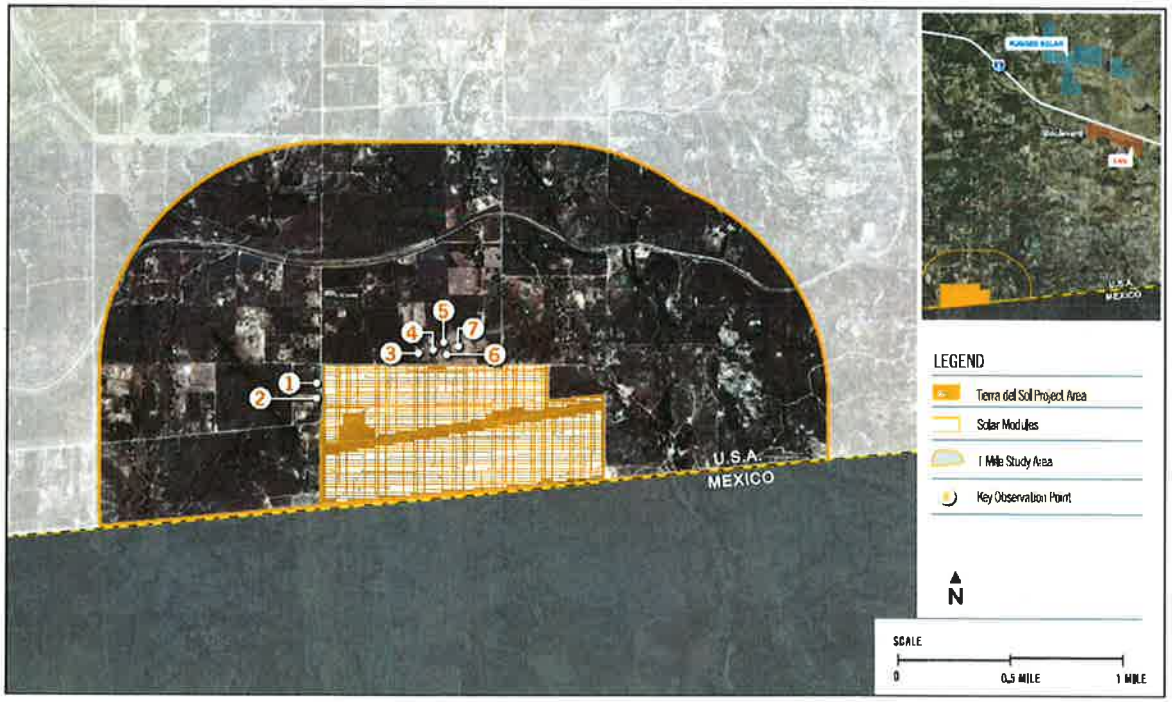


FALL

WINTER





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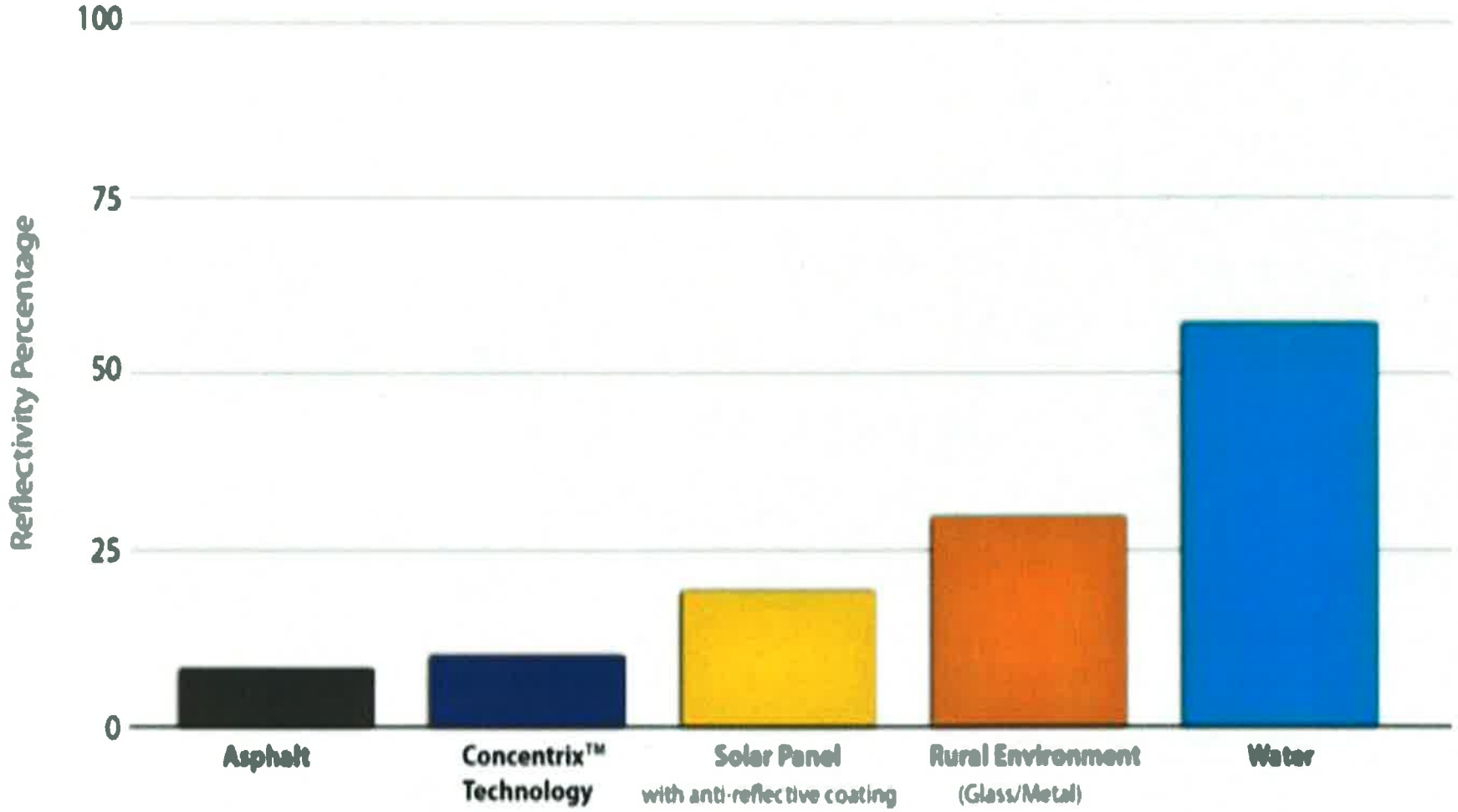
POWER ENGINEERS

GLARE BEHAVIORAL ANALYSIS

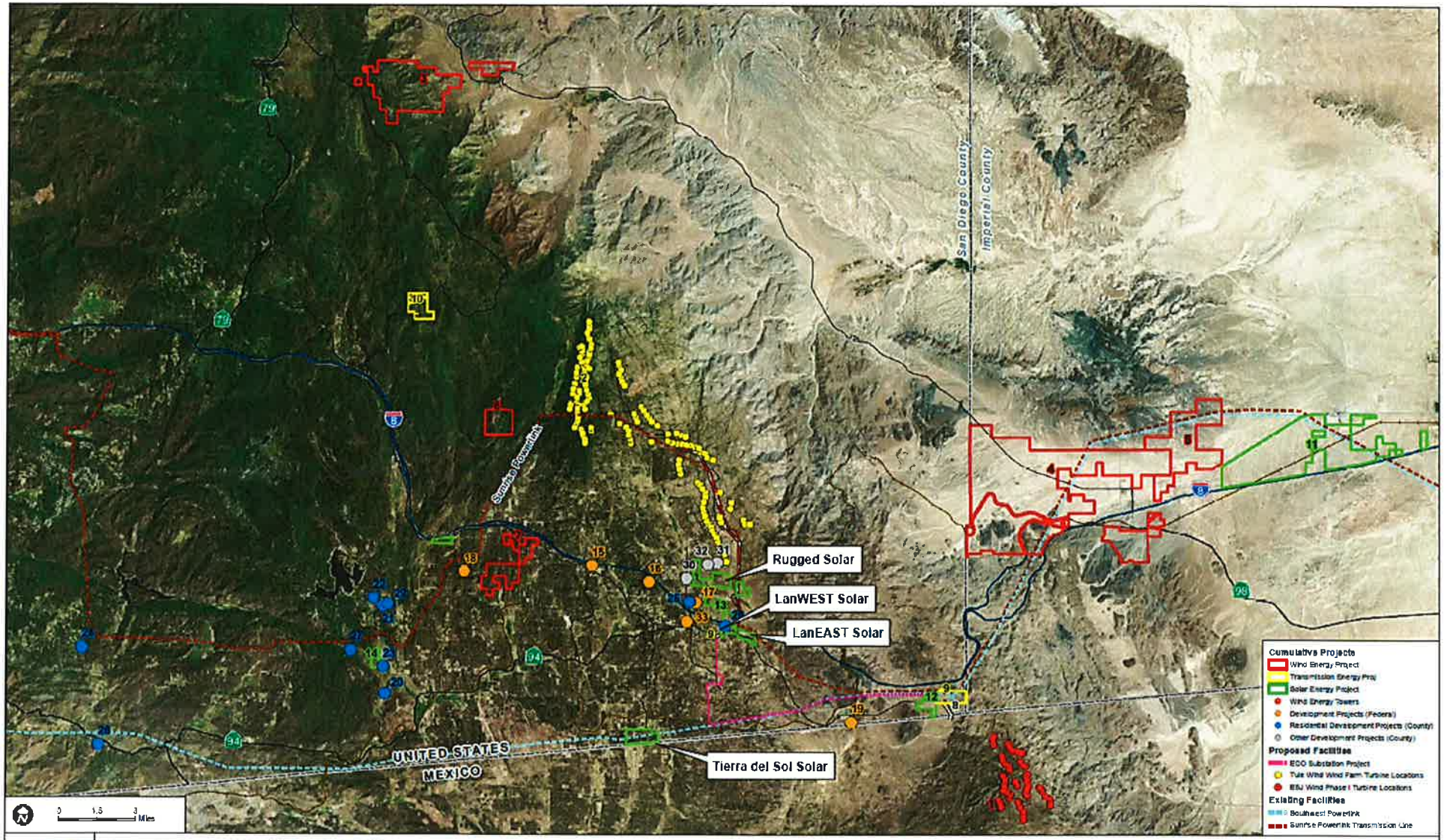
Tierra del Sol Results

FIGURE 12 COMPARATIVE REFLECTIVE ANALYSIS



SunPower Corporation. (2009) SunPower Solar Module Glare And Reflectance

Reflexite Energy Solutions. (2011) Reliability of SOG for CPV Primary Optics



DUDEK

7345

SOURCE: CA Dept. of Conservation, 2009; SanGIS 2011; AECOM 2012; Soitec 2012

FIGURE 1-12

Cumulative Projects Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR

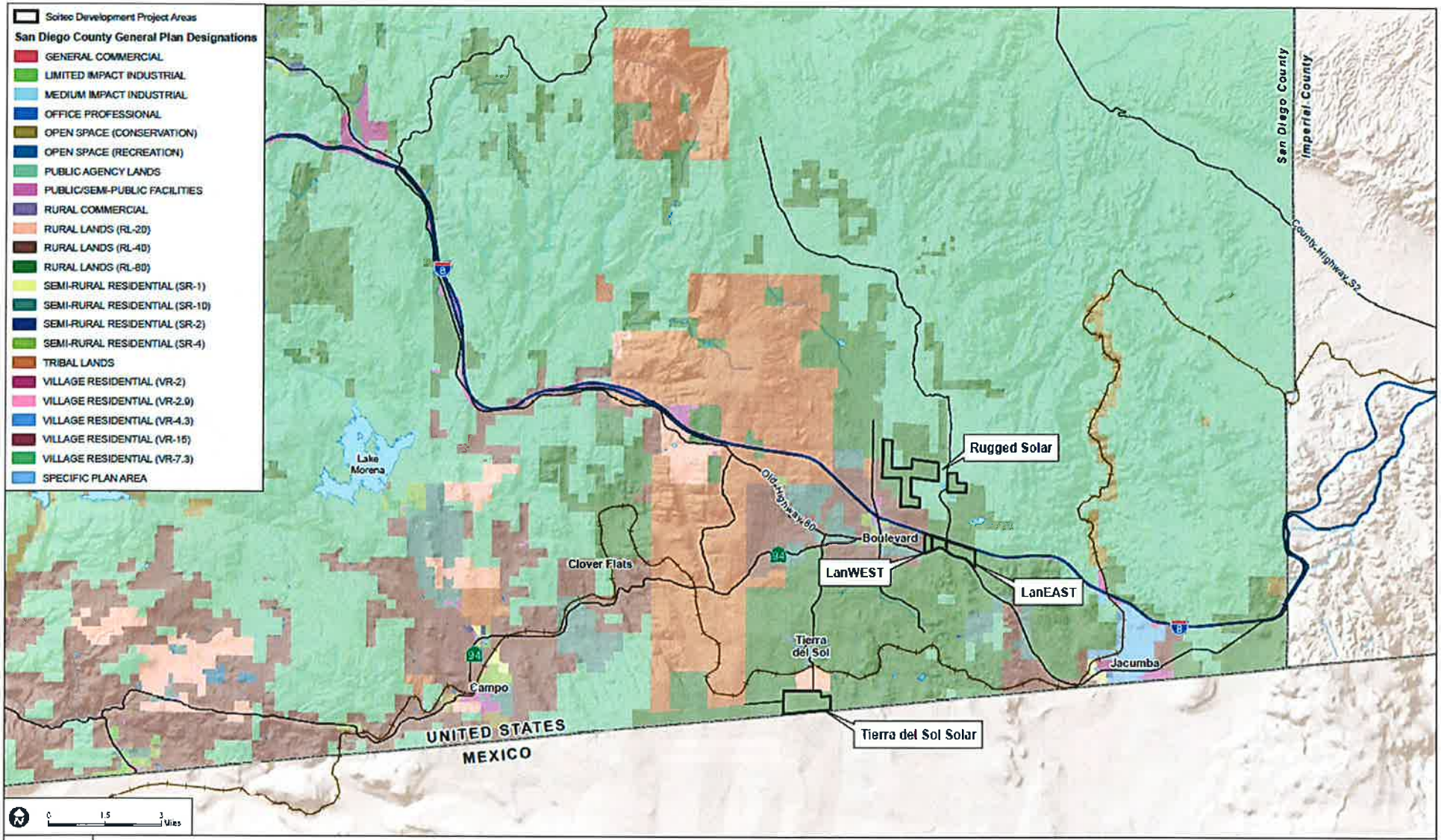
DUDEK

7122-2

SOURCE: San Diego County 2011; CPUC and BLM 2009; BLM 2010; SanGIS 2012; SANDAG 2012; Bing Maps

FIGURE 2.5-1
Existing Land Uses

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

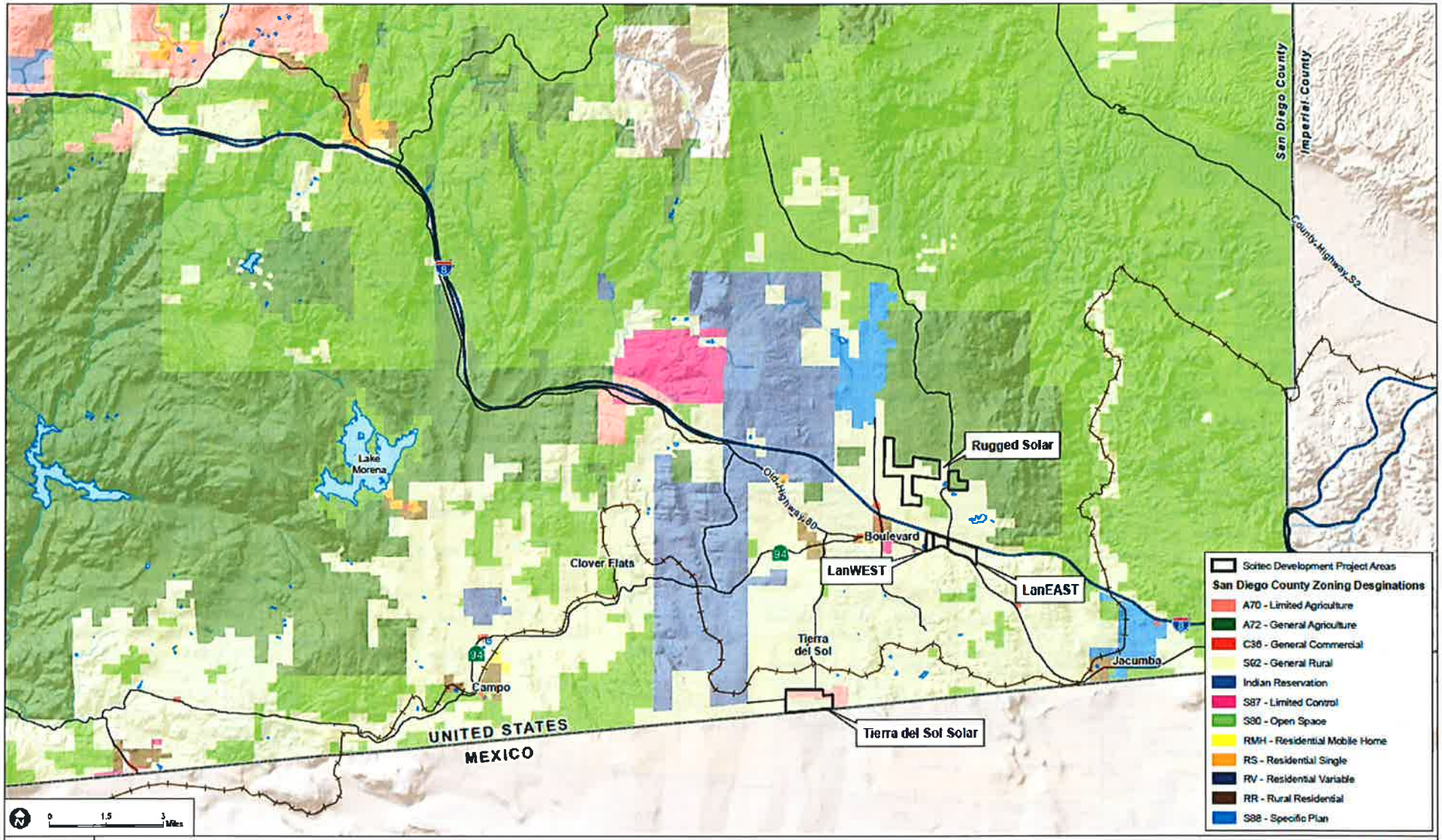
SOURCE: SanGIS 2012; SANDAG 2013

7123

FIGURE 2.5-2

General Plan Land Use Designation Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

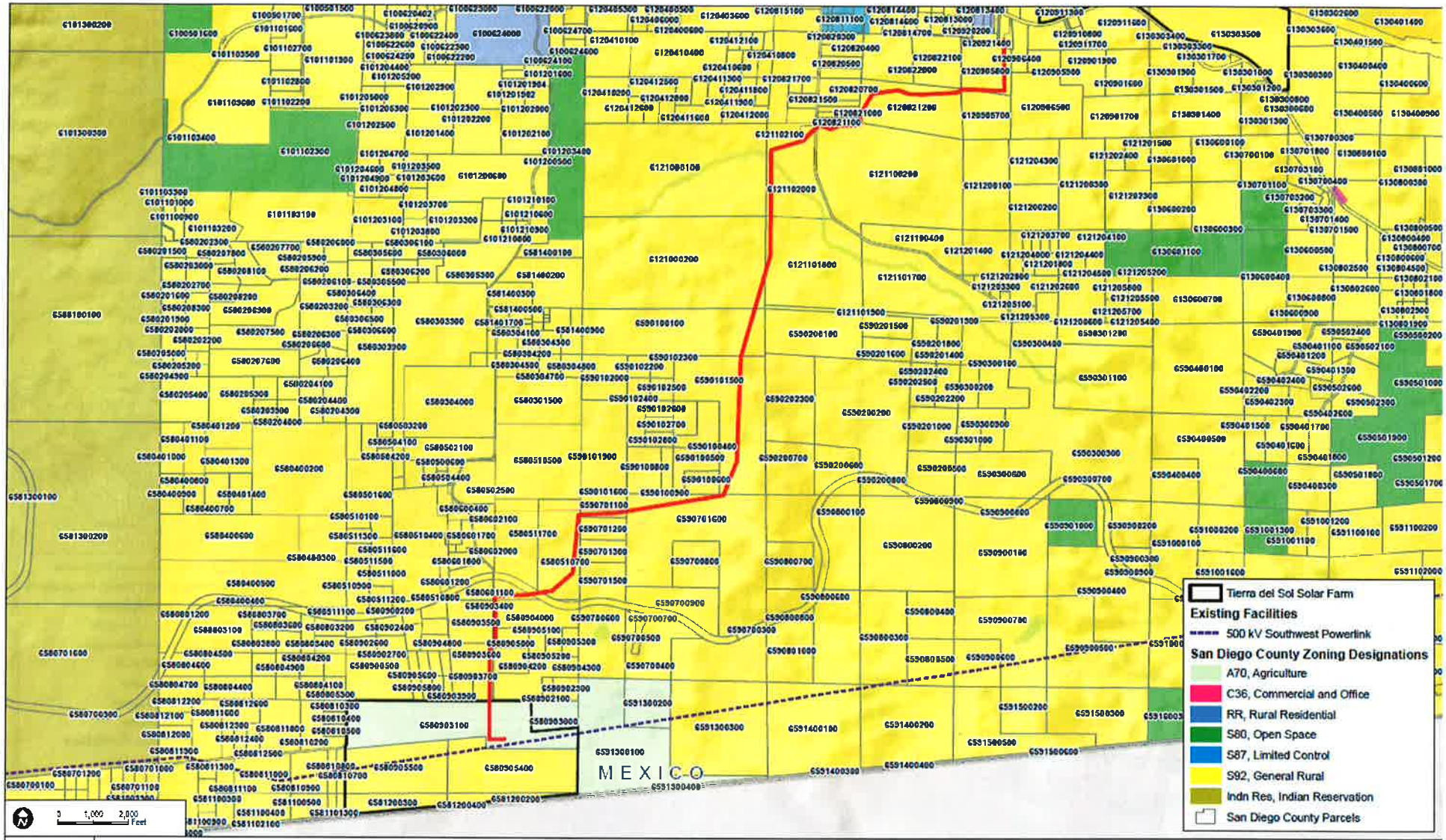
7123

SOURCE: SanGIS 2012; SANDAG 2012

FIGURE 2.5-3

Project Zoning Map

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

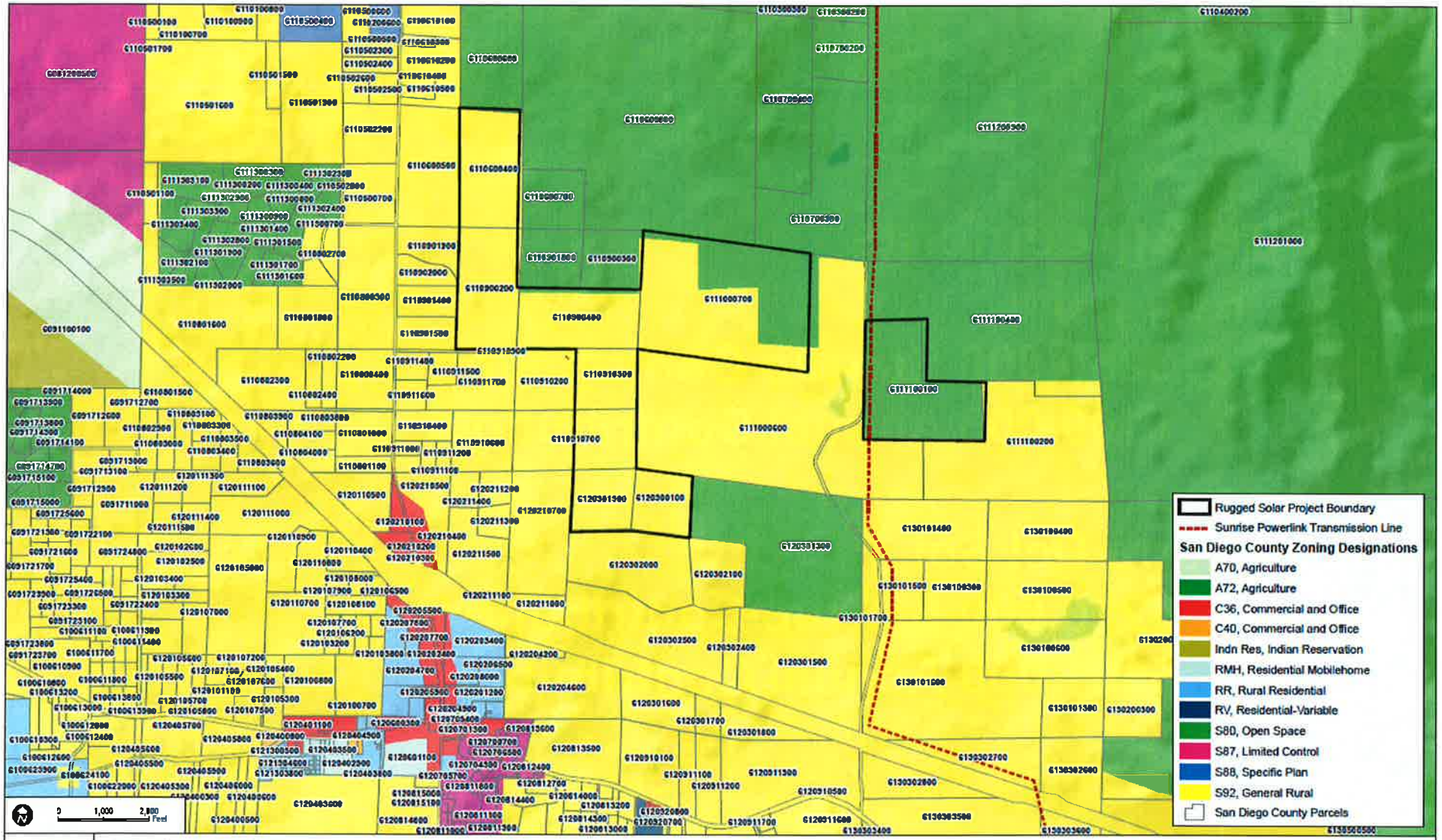
7345

SOURCE: SanGIS 2013; SANDAG 2013; AECOM 2013; Dudek 2013

FIGURE 3.1.1-1

Tierra del Sol Solar Farm - County Zoning

SOITEC SOLAR DEVELOPMENT PROGRAM EIR



DUDEK

7545

SOURCE: ESRI GIS 2011; AECOM 2012; Soitec 2012

FIGURE 3.1.1-4

Rugged Solar - County Zoning

SOITEC SOLAR DEVELOPMENT PROGRAM EIR

Fire

- **Fire Agreements**
  - **Rugged**
    - **$250,000 Startup Contribution**
    - **$109,000 Annual Contribution**
  - **Tierra Del Sol**
    - **$210,000 Startup Contribution**
    - **$101,000 Annual Contribution**