

Lorelei H. Oviatt, AICP, Director
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Bakersfield, CA 93301-2323
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Web Address: <http://kernplanning.com/>



PLANNING AND NATURAL RESOURCES DEPARTMENT

Planning
Community Development
Administrative Operations

NOTICE OF PREPARATION

DATE: September 10, 2019

TO: See Attached Mailing List

FROM: Kern County Planning and
Natural Resources Department
Attn: Randall Cates
2700 "M" Street, Suite 100
Bakersfield, CA 93301
(661) 862-8612; catesr@kerncounty.com

RE: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

The Kern County Planning and Natural Resources Department, as Lead Agency (pursuant to California Environmental Quality Act [CEQA] Guidelines Section 15052) has determined that preparation of an Environmental Impact Report (EIR) (pursuant to CEQA Guidelines Section 15161) is necessary for the project identified below. The Planning and Natural Resources Department solicits the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities about the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval of projects.

Due to the limits mandated by State law, your response must be received by **October 10, 2019 at 5:00 p.m.** In addition, comments can also be submitted at a **scoping meeting** that will be held at the Kern County Planning and Natural Resources Department on **October 4, 2019 at 1:30 p.m.** at the address shown above.

PROJECT TITLE: AVEP Solar Project by Chaparral Solar, LLC, Rabbitbrush Solar, LLC, and Tumbleweed Solar, LLC; SPA 1, Map 231-18; SPA 2, Map 231-18; SPA 25, Map 232; SPA 26, Map 232; SPA 27 Map 232; SPA 28, Map 232; SPA 29, Map 232; SPA 30, Map 232; ZCC 3, Map 231-18; ZCC 40, Map 232; ZCC 41, Map 232; ZCC 42, Map 232; CUP 1, Map 231-18; CUP 33, Map 232; CUP 34, Map 232; CUP 35, Map 232; CUP 36, Map 232; CUP 37, Map 232; CUP 38, Map 232; Vacations of Public Access Easements 03 098 232 (PP18141).

PROJECT LOCATION: The project is located approximately 5½ miles west of the unincorporated community of Rosamond on 75 parcels totaling approximately 2,117 acres. The site is located within portions of Section 18 of Township 9 North, Range 13 West, San Bernardino Base and Meridian (SBBM), and within portions of Sections 9, 10, 12, 13, 14, 15, 25, 26 and 36 of Township 9 North, Range 14 West, SBBM.

PROJECT DESCRIPTION: AVEP Solar Project (proposed project), would develop three photovoltaic (PV) solar facilities and associated infrastructure necessary to generate a combined total of approximately 375 megawatts (MW) of renewable electrical energy including associated energy storage systems on approximately 2,117 acres of privately-owned land. The proposed project consists of three solar facilities: Chaparral Solar Facility, Rabbitbrush Solar Facility, and Tumbleweed Facility, which are 764 acres, 632 acres, and 721 acres in size, respectively.

Implementation of the project, as proposed, would include:

- (a) Four Specific Plan Amendments to the Willow Springs Specific Plan, from designations 5.3/2.85 (Maximum 10 units/net acre / Noise Management Area (65db)), 5.3/4.4 (Maximum 10 units/net acre/ Comprehensive Planning Area), 5.3/4.4/2.1 (Maximum 10 units/net acre/ Comprehensive Planning Area/ Seismic Hazard), 5.6 (Minimum 2.5 gross acres/unit), 5.6/2.8 (Minimum 2.5 gross acres/unit / Military Flight Operations (60db)), 5.6/2.85 (Minimum 2.5 gross acres/unit / Noise Management Area (65db)), 5.7 (Minimum 5 gross acres/unit), 5.75 (Minimum 10 gross acres/unit), 6.2 (General Commercial) and 8.5 (Resources Management (Minimum 20-acre


parcel size)) to designations 8.1 (Intensive Agriculture (Minimum 20-acre Parcel Size)), 8.1/2.1 (Intensive Agriculture (Minimum 20-acre Parcel Size) / Seismic Hazard), 8.1/2.8 (Intensive Agriculture (Minimum 20-acre Parcel Size) / Military Flight Operations (60db)) and 8.1/2.85 (Intensive Agriculture (Minimum 20-acre Parcel Size) / Noise Management Area (65db)), totaling approximately 10 acres in T9N/R13W SBB&M and approximately 1,727 acres in T9N/R14W SBB&M.

- (b) Four Specific Plan Amendments to amend the Circulation Plan of the Willow Springs Specific Plan, to eliminate future road reservations along Section lines in Sections 7 and 18 T9N/R13W SBB&M, and to eliminate future road reservations along Section and Mid-Section lines in Sections 10, 11, 12, 13, 14, 15 and 36 T9N/R14W SBB&M.
- (c) Four Changes in zone classification from the existing zone districts of approximately 10 acres of E(2½) RS FPS in Zone Map 231-18, approximately 472 acres of E(2½) RS FPS in Zone Map 232, approximately 160.5 acres of E(5) RS FPS in Zone Map 232, and approximately 18 acres of E(10) RS FPS in Zone Map 232, to the A FPS (Exclusive Agriculture – Floodplain Secondary Combining) District.
- (d) Four Conditional Use Permits, one in Zone Map 231-18 and three in Zone Map 232, to allow for the construction and operation of three solar facilities with a total generating capacity of approximately 375 megawatts within the A (Exclusive Agriculture) Zone District, pursuant to Section 19.12.030.G of the Kern County Zoning Ordinance. Each of the three facilities would have a generating capacity of approximately 125 megawatts.
- (e) Three Conditional Use Permits, in Zone Map 232, to allow for the construction and operation of communication tower(s) in conjunction with the proposed solar facilities.
- (f) Three requests for nonsummary vacations of public access easements, one corresponding to each of the three solar facilities.
- (g) The project's permanent facilities would include service roads, communication towers, communication cables, overhead and underground transmission lines, energy storage systems, operations and maintenance facilities, and a gen-tie and/or collection lines to transmit electricity generated on the project site.

Document can be viewed online at: <https://kernplanning.com/planning/notices-of-preparation/>

Signature:

Name:



Randall Cates, Planner III

AVEP Solar for Maps #231-18 & 232
WO #PP18141 (EIR 03-18)
I:\Planning\WORKGRPS\WP\LABELS\eir03-18rpc.nop.doc
Sc 07/30/19

APP

First Solar, Inc.
Attn: Kenzie Woods
135 Main Street, 6th Floor
San Francisco, CA 94105

City of Arvin
P.O. Box 548
Arvin, CA 93203

Bakersfield City Planning Dept
1715 Chester Avenue
Bakersfield, CA 93301

Bakersfield City Public Works Dept
1501 Truxtun Avenue
Bakersfield, CA 93301

California City Planning Dept
21000 Hacienda Blvd.
California City, CA 93515

Delano City Planning Dept
P.O. Box 3010
Delano, CA 93216

City of Maricopa
P.O. Box 548
Maricopa, CA 93252

City of McFarland
401 West Kern Avenue
McFarland, CA 93250

City of Ridgecrest
100 West California Avenue
Ridgecrest, CA 93555

City of Shafter
336 Pacific Avenue
Shafter, CA 93263

City of Taft
Planning & Building
209 East Kern Street
Taft, CA 93268

City of Tehachapi
Attn: John Schlosser
115 South Robinson Street
Tehachapi, CA 93561-1722

City of Wasco
764 E Street
Wasco, CA 93280

Inyo County Planning Dept
P.O. Drawer "L"
Independence, CA 93526

Kings County Planning Agency
1400 West Lacey Blvd, Bldg 6
Hanford, CA 93230

Los Angeles Co Reg Planning Dept
320 West Temple Street
Los Angeles, CA 90012

San Bernardino Co Planning Dept
385 North Arrowhead Avenue, 1st Floor
San Bernardino, CA 92415-0182

San Luis Obispo Co Planning Dept
Planning and Building
976 Osos Street
San Luis Obispo, CA 93408

Santa Barbara Co Resource Mgt Dept
123 East Anapamu Street
Santa Barbara, CA 93101

Tulare County Planning & Dev Dept
5961 South Mooney Boulevard
Visalia, CA 93291

Ventura County RMA Planning Div
800 South Victoria Avenue, L1740
Ventura, CA 93009-1740

U.S. Bureau of Land Management
Caliente/Bakersfield
3801 Pegasus Drive
Bakersfield, CA 93308-6837

China Lake Naval Weapons Center
Tim Fox, RLA - Comm Plans & Liaison
429 E Bowen, Building 981
Mail Stop 4001
China Lake, CA 93555

Edwards AFB, Sustainability Office
412 TW/XPO, Bldg 2750, Rm 204-38
195 East Popson Avenue
Edwards AFB, CA 93524

U.S. Fish & Wildlife Service
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, CA 92262

Antelope Valley Resource Cons Dist
44811 Date Avenue, #G
Lancaster, CA 93534-3136

Environmental Protection Agency
Region IX Office
75 Hawthorn Street
San Francisco, CA 94105

U.S. Dept of Agriculture/NRCS
5080 California Avenue, Ste 150
Bakersfield, CA 93309-0711

U.S. Army Corps of Engineers
Regulatory Division
1325 "J" Street, #1350
Sacramento, CA 95814-2920

U.S. Postal Service
Address Management Systems
28201 Franklin Parkway
Santa Clarita, CA 91383-9321

So. San Joaquin Valley Arch Info Ctr
California State University of Bkfd
9001 Stockdale Highway
Bakersfield, CA 93311

Caltrans/Dist 6
Planning/Land Bank Bldg.
P.O. Box 12616
Fresno, CA 93778

Caltrans/Dist 9
Planning Department
500 South Main Street
Bishop, CA 93514

State Clearinghouse
Office of Planning and Research
1400 - 10th Street, Room 222
Sacramento, CA 95814

State Dept of Conservation
Director's Office
801 "K" Street, MS 24-01
Sacramento, CA 95814-3528

State Dept of Conservation
Division of Oil & Gas
4800 Stockdale Highway, Ste 108
Bakersfield, CA 93309

State Dept of Conservation
Office of Land Conservation
801 "K" Street, MS 18-01
Sacramento, CA 95814

California State University
Bakersfield - Library
9001 Stockdale Highway
Bakersfield, CA 93309

California Energy Commission
James W. Reed, Jr.
1516 Ninth Street
Mail Stop 17
Sacramento, CA 95814

California Fish & Wildlife
1234 East Shaw Avenue
Fresno, CA 93710

Public Utilities Comm Energy Div
505 Van Ness Avenue
San Francisco, CA 94102

California Regional Water Quality
Control Board/Lahontan Region
15095 Amargosa Road - Bld 2, Suite 210
Victorville, CA 92392

State Dept of Water Resources
San Joaquin Dist.
3374 East Shields Avenue, Room A-7
Fresno, CA 93726

Kern County
Agriculture Department

Kern County Administrative Officer

Kern County Public Works Department/
Building & Development/Floodplain

Kern County Public Works Department/
Building & Development/Survey

Kern County
Env Health Services Department

Kern County Fire Dept
David Witt, Interim Fire Chief

Kern County Fire Dept
Cary Wright, Fire Marshall

Kern County Library/Beale
Local History Room

Kern County Library/Beale
Andie Sullivan

Kern County Library
Wanda Kirk/Rosamond Branch
3611 Rosamond Boulevard
Rosamond, CA 93560

Kern County Parks & Recreation

Kern County Sheriff's Dept
Administration

Kern County Public Works Department/
Building & Development/Development
Review

Kern County Public Works
Department/Operations &
Maintenance/Regulatory Monitoring &
Reporting

Kern County Public Works Department/
Building & Development/Code
Compliance

Rosamond Municipal Advisory Council
P.O. Box 626
Rosamond, CA 93560

Mojave Town Council
Bill Deaver, President
P.O. Box 1113
Mojave, CA 93502-1113

Southern Kern Unified School Dist
P.O. Box CC
Rosamond, CA 93560

Kern County Superintendent of Schools
Attention Mary Baker
1300 17th Street
Bakersfield, CA 93301

KernCOG
1401 19th Street - Suite 300
Bakersfield, CA 93301

Antelope Valley-East Kern
Water Agency
6500 West Avenue N
Palmdale, CA 93551

Kern County Water Agency
P.O. Box 58
Bakersfield, CA 93302-0058

East Kern Air Pollution
Control District

Adams, Broadwell, Joseph & Cardozo
Attention: Janet M. Laurain
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

AT&T California
OSP Engineering/Right-of-Way
4540 California Avenue, 4th Floor
Bakersfield, CA 93309

Kern Audubon Society
Attn: Harry Love, President
13500 Powder River Avenue
Bakersfield, CA 93314

Los Angeles Audubon
926 Citrus Avenue
Los Angeles, CA 90036-4929

Center on Race, Poverty
& the Environment
Attn: Marissa Alexander
1999 Harrison Street – Suite 650
San Francisco, CA 94612

Center on Race, Poverty
& the Environmental/
CA Rural Legal Assistance Foundation
1012 Jefferson Street
Delano, CA 93215

Defenders of Wildlife/
Kim Delfino, California Dir
980 - 9th Street, Suite 1730
Sacramento, CA 95814

Mojave Chamber of Commerce
P.O. Box 935
Mojave, CA 93502

Native American Heritage Council
of Kern County
Attn: Gene Albitre
3401 Aslin Street
Bakersfield, CA 93312

Beth Boyst
Pacific Crest Trail Program Manager
1323 Club Drive
Vallejo, CA 94592

Anitra Kass
Pacific Crest Trail Association
41860 Saint Annes Bay Drive
Bermuda Dunes, CA 92203

Sierra Club/Kern Kaweah Chapter
P.O. Box 3357
Bakersfield, CA 93385

Southern California Edison
2244 Walnut Grove, Ave, GO-1 Quad 2C
Rosemead, CA 91770

Southern California Gas Co
1510 North Chester Avenue
Bakersfield, CA 93308

Southern California Gas Co
Transportation Dept
9400 Oakdale Avenue
Chatsworth, CA 91313-6511

Chumash Council of Bakersfield
2421 "O" Street
Bakersfield, CA 93301-2441

David Laughing Horse Robinson
P.O. Box 20849
Bakersfield, CA 93390

Kern Valley Indian Council
Attn: Robert Robinson, Chairperson
P.O. Box 401
Weldon, CA 93283

Kern Valley Indian Council
Historic Preservation Office
P.O. Box 401
Weldon, CA 93283

Santa Rosa Rancheria
Ruben Barrios, Chairperson
P.O. Box 8
Lemoore, CA 93245

Tejon Indian Tribe
Kathy Morgan, Chairperson
1731 Hasti-acres Drive, Suite 108
Bakersfield, CA 93309

Kitanemuk & Yowlumne Tejon Indians
Chairperson
115 Radio Street
Bakersfield, CA 93305

Tubatulabals of Kern County
Attn: Robert Gomez, Chairperson
P.O. Box 226
Lake Isabella, CA 93240

Tule River Indian Tribe
Neal Peyron, Chairperson
P.O. Box 589
Porterville, CA 93258

Matthew Gorman
The Gorman Law Firm
1346 E. Walnut Street, Suite 220
Pasadena, CA 91106

Matthew Gorman
The Gorman Law Firm
1346 E. Walnut Street, Suite 220
Pasadena, CA 91106

Eight Bar Ranch
Jon and Helen Lantz
11300 Cameron Canyon Road
Mojave, CA 93501

Fairmont Town Council
Attn: Barbara Rogers
P.O. Box 2320
Rosamond, CA 93560

Joyce LoBasso
P.O. Box 6003
Bakersfield, CA 93386

LIUNA
Attn: Danny Zaragoza
2201 "H" Street
Bakersfield, CA 93301

Northcutt and Associates
4220 Poplar Street
Lake Isabella, CA 93240-9536

Terra-Gen Power, LLC
Randy Hoyle
11512 El Camino Real, Suite 370
San Diego, CA 92130-3025

Sarah K. Friedman
Beyond Coal Campaign/Sierra Club
1417 Calumet Avenue
Los Angeles, CA 90026

Lozeau Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612

Southern California Edison
Planning Dept.
421 West "J" Street
Tehachapi, CA 93561

Terra-Gen
Randy Hoyle, Sr. Vice Pres
11512 El Camino Real, Suite 370
San Diego, CA 92130

Renewal Resources Group
Holding Company
Rupal Patel
113 South La Brea Avenue, 3rd Floor
Los Angeles, CA 90036

Congentrix Sunshine, LLC
Rick Neff
9405 Arrowpoint Blvd
Charlotte, NC 28273

Fotowatio Renewable Ventures
Sean Kiernan
44 Montgomery Street, Suite 2200
San Francisco, CA 94104

EDP Renewables Company
53 SW Yamhill Street
Portland, OR 97204

Wind Stream, LLC
Albert Davies
1275 - 4th Street, No. 107
Santa Rosa, CA 95404

Darren Kelly, Sr. Business Mgr
Terra-Gen Power, LLC
1095 Avenue of the Americas, 25th
Floor, Ste A
New York, NY 10036-6797

Bill Barnes, Dir of Asset Mgt
AES Midwest Wind Gen
P.O. Box 2190
Palm Springs, CA 92263-2190

PG&E
Steven Ng, Manager
Renewal Dev, T&D Intercon
77 Beal Street, Room 5361
San Francisco, CA 94105

Wayne Mayes, Dir Tech Serv
Iberdrola Renewables
1125 NW Couch St, Ste 700, 7th Fl
Portland, OR 97209

Michael Strickler, Sr Project Mgr
Iberdrola Renewables
1125 NW Couch St, Ste 700, 7th Fl
Portland, OR 97209

Recurrent Energy
Seth Israel
300 California Street, 8th Floor
San Francisco, CA 92109

Tehachapi Area Assoc of Realtors
Carol Lawhon, Assoc Exe, IOM
803 Tucker Road
Tehachapi, CA 93561

Kelly Group
Kate Kelly
P.O. Box 868
Winters, CA 95694

Beyond Coal Campaign/Sierra Club
Sarah K. Friedman
1417 Calumet Avenue
Los Angeles, CA 90026

Robert Burgett
9261 - 60th Street, West
Mojave, CA 93501

Structure Cast
Larry Turpin, Sales Mgr
8261 McCutchen Road
Bakersfield, CA 93311

David Walsh
22941 Banducci Road
Tehachapi, CA 93561

U.S. Army
Attn: Tim Kilgannon, Region 9
Coordinator
Office of Strategic Integration
721 - 19th Street, Room 427
Denver, CO 80202

U.S. Air Force
Attn: David Bell/AFCEC CZPW
Western Regional/Leg Branch
510 Hickman Ave., Bld 250-A
Travis AFB, CA 94535-2729

U.S. Army
Attn: Philip Crosbie, Chief
Strategic Plans, S3, NTC
P.O. Box 10172
Fort Irwin, CA 92310

U.S. Marine Corps
Attn: Patrick Christman
Western Regional Environmental Officer
Building 1164/Box 555246
Camp Pendleton, CA 92055-5246

U.S. Navy
Attn: Steve Chung
Regional Community & Liaison Officer
1220 Pacific Highway
San Diego, CA 92132-5190

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613

For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # _____

Project Title: EIR 03-18; AVEP Solar Project by Chaparral Solar, LLC, Rabbitbrush Solar, LLC, and Tumbleweed Solar, LLC

Lead Agency: Kern County Planning and Natural Resources Department

Contact Person: Randall Cates

Mailing Address: 2700 "M" Street Suite 100

Phone: 661-862-8612

City: Bakersfield

Zip: 93301-2323

County: Kern

Project Location: County: Kern City/Nearest Community: Rosamond

Cross Streets: Approximately 5½ miles west of the unincorporated community of Rosamond, being portions of Section 18 of Township 9 North, Range 13 West, San Bernardino Base and Meridian (SBBM), and portions of Sections 9, 10, 12, 13, 14, 15, 25, 26 and 36 of Township 9 North, Range 14 West, SBBM., County of Kern, State of California

Lat. / Long.: 34° 51' 49.6563" N/ 118° 20' 20.2236" W Total Acres: 2,117

Assessor's Parcel No.: 252-341-48; 358-010-04, -13, -14, -17, -18, -19; 358-030-05, -06, -07, -08, -09, -10, -11, -12, -14, -15, -16, -17, -19, -22, -23, -24, -26, -27, -28, -29, -30, -33; 358-141-34; 358-152-03, -25, -26, -27, -39, -40, -54, -55, -56, -57, -58; 358-160-01, -02, -07, -08, -09, -10, -13, -14, -21, -24, -25, -26, -27, -29, -30, -31; 358-360-04, -05; 358-390-09, -16; 359-183-02; 359-031-07; 359-032-08, -13, -14, -20, -21, -27, -28, -34, -35, -36, -37, -38

Section: 18 / 9, 10, 12, 13, 14, 15, 25, 26, 36 Twp.: 9N Range: 13W / 14W Base: SBB&M

Within 2 Miles: State Hwy #: N/A

Waterways: N/A

Airports: N/A

Railways: N/A

Schools: N/A

Document Type:

CEQA: ☒ NOP ☐ Draft EIR NEPA: ☐ NOI Other: ☐ Joint Document
☐ Early Cons ☐ Supplement/Subsequent EIR ☐ EA ☐ Final Document
☐ Neg Dec (Prior SCH No.) ☐ Draft EIS ☐ Other
☐ Mit Neg Dec Other _____ ☐ FONSI

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☒ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, etc.) ☒ Other: Zone Change
☒ Other: Specific Plan Amendment ☒ Other: Nonsummary vacation of public access easements

Development Type:

☐ Residential: Units _____ Acres _____ ☐ Water Facilities: Type _____ MGD _____
☐ Office: Sq.ft. _____ Acres _____ Employees _____ ☐ Transportation: Type _____
☐ Commercial: Sq.ft. _____ Acres _____ Employees _____
☐ Mining: Mineral
☐ Industrial: Sq.ft. _____ Acres _____ Employees _____ ☒ Power: Type Solar PV MW 375
☐ Educational ☐ Waste Treatment: Type _____ MGD _____
☐ Recreational ☐ Hazardous Waste: Type _____
☒ Other: communication towers

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☐ Fiscal ☐ Recreation/Parks ☒ Vegetation
☒ Agricultural Land ☒ Flood Plain/Flooding ☒ Schools/Universities ☒ Water Quality
☒ Air Quality ☒ Forest Land/Fire Hazard ☒ Septic Systems ☒ Water Supply/Groundwater
☒ Archeological/Historical ☒ Geologic/Seismic ☒ Sewer Capacity ☒ Wetland/Riparian
☒ Biological Resources ☒ Minerals ☒ Soil Erosion/Compaction/Grading ☒ Wildlife
☐ Coastal Zone ☒ Noise ☒ Solid Waste ☒ Growth Inducing
☒ Drainage/Absorption ☒ Population/Housing Balance ☒ Toxic/Hazardous ☒ Land Use
☒ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☒ Cumulative Effects
☒ Other: Greenhouse Gas Emissions, Tribal Cultural Resources, Wildfire, Energy

Present Land Use/Zoning/General Plan Designation:

- Chaparral Solar Facility: inhabited residence, undeveloped land / *Zoning*: A FPS (Exclusive Agriculture - Floodplain Secondary Combining), A GH FPS (Exclusive Agriculture - Geologic Hazard - Floodplain Secondary Combining), E(2½) RS FPS (Estate (2 1/2 Acres) - Residential Suburban Combining - Floodplain Secondary Combining) / *Willow Springs Specific Plan*: 5.3/4.4 (Maximum 10 units/net acre/ Comprehensive Planning Area), 5.3/4.4/2.1 (Maximum 10 units/net acre/ Comprehensive Planning Area/ Seismic Hazard), 5.6 (Minimum 2.5 gross acres/unit), 6.2 (General Commercial).
 - Rabbitbrush Solar Facility: uninhabited residence, undeveloped land / *Zoning*: A FPS, E(2½) RS FPS, E(5) RS FPS (Estate (5 Acres) - Residential Suburban Combining - Floodplain Secondary Combining), E(10) RS FPS (Estate (10 Acres) - Residential Suburban Combining - Floodplain Secondary Combining) / *Willow Springs Specific Plan*: 5.3/4.4, 5.6, 5.7 (Minimum 5 gross acres/unit), 5.75 (Minimum 10 gross acres/unit), 8.5 (Resources Management (Minimum 20-acre parcel size)).
 - Tumbleweed Solar Facility: three inhabited residences, orchards, undeveloped land / *Zoning*: A FPS, E(2½) RS FPS / *Willow Springs Specific Plan*: 5.3/2.85 (Maximum 10 units/net acre / Noise Management Area (65db)), 5.6/2.8 (Minimum 2.5 gross acres/unit / Military Flight Operations (60db)), 5.6/2.85 (Minimum 2.5 gross acres/unit / Noise Management Area (65db)), 6.2, 8.1/2.8 (Intensive Agriculture (Minimum 20-acre Parcel Size) / Military Flight Operations (60db)), 8.1/2.85 (Intensive Agriculture (Minimum 20-acre Parcel Size) / Noise Management Area (65db)).
-

Project Description: (please use a separate page if necessary)

The project proponents are requesting:

- Four Specific Plan Amendments to the Willow Springs Specific Plan, from designations 5.3/2.85 (Maximum 10 units/net acre / Noise Management Area (65db)), 5.3/4.4 (Maximum 10 units/net acre/ Comprehensive Planning Area), 5.3/4.4/2.1 (Maximum 10 units/net acre / Comprehensive Planning Area / Seismic Hazard), 5.6 (Minimum 2.5 gross acres/unit), 5.6/2.8 (Minimum 2.5 gross acres/unit / Military Flight Operations (60db)), 5.6/2.85 (Minimum 2.5 gross acres/unit / Noise Management Area (65db)), 5.7 (Minimum 5 gross acres/unit), 5.75 (Minimum 10 gross acres/unit), 6.2 (General Commercial) and 8.5 (Resources Management (Minimum 20-acre parcel size)) to designations 8.1 (Intensive Agriculture (Minimum 20-acre Parcel Size)), 8.1/2.1 (Intensive Agriculture (Minimum 20-acre Parcel Size / Seismic Hazard), 8.1/2.8 (Intensive Agriculture (Minimum 20-acre Parcel Size) / Noise Management Area (65db)), totaling approximately 10 acres in T9N/R13W SBB&M and approximately 1,727 acres in T9N/R14W SBB&M. (SPA 1, Map 231-18; SPA 25, Map 232; SPA 27, Map 232; SPA 29, Map 232).
- Four Specific Plan Amendments to amend the Circulation Plan of the Willow Springs Specific Plan, to eliminate future road reservations along Section lines in Sections 7 and 18 T9N/R13W SBB&M, and to eliminate future road reservations along Section and Mid-Section lines in Sections 10, 11, 12, 13, 14, 15 and 36 T9N/R14W SBB&M. (SPA 2, Map 231-18; SPA 26, Map 232; SPA 28, Map 232; SPA 30, Map 232).
- Four Changes in zone classification from the existing zone districts of approximately 10 acres of E(2½) RS FPS in Zone Map 231-18, approximately 472 acres of E(2½) RS FPS in Zone Map 232, approximately 160.5 acres of E(5) RS FPS in Zone Map 232, and approximately 18 acres of E(10) RS FPS in Zone Map 232, to the A FPS (Exclusive Agriculture - Floodplain Secondary Combining) District. (ZCC 3, Map 231-18; ZCC 40, Map 232; ZCC 41, Map 232; ZCC 42, Map 232).
- Four Conditional Use Permits, one in Zone Map 231-18 and three in Zone Map 232, to allow for the construction and operation of three solar facilities with a total generating capacity of approximately 375 megawatts within the A (Exclusive Agriculture) Zone District, pursuant to Section 19.12.030.G of the Kern County Zoning Ordinance. Each of the three facilities would have a generating capacity of approximately 125 megawatts. (CUP 1, Map 231-18; CUP 33, Map 232; CUP 35, Map 232; CUP 37, Map 232).
- Three Conditional Use Permits, in Zone Map 232, to allow for the construction and operation of communication tower(s) in conjunction with the proposed solar facilities. (CUP 34, Map 232; CUP 36, Map 232; CUP 38, Map 232).
- Three requests for nonsummary vacations of public access easements, one corresponding to each of the three solar facilities.
- The project's permanent facilities would include service roads, communication towers, communication cables, overhead and underground transmission lines, energy storage systems, operations and maintenance facilities, and a gen-tie and/or collection lines to transmit electricity generated on the project site.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".

If you have already sent your document to the agency please denote that with an "S".

_____ Air Resources Board	_____ Office of Emergency Services
_____ Boating & Waterways, Department of	_____ Office of Historic Preservation
_____ California Highway Patrol	_____ Office of Public School Construction
_____ CalFire	_____ Parks & Recreation
S _____ Caltrans District # 6 & 9	_____ Pesticide Regulation, Department of
_____ Caltrans Division of Aeronautics	S _____ Public Utilities Commission
_____ Caltrans Planning (Headquarters)	S _____ Regional WQCB # <u>Lahontan</u>
_____ Central Valley Flood Protection Board	_____ Resources Agency
_____ Coachella Valley Mountains Conservancy	_____ S.F. Bay Conservation & Development Commission

_____ Coastal Commission
_____ Colorado River Board
_____ S Conservation, Department of
_____ Corrections, Department of
_____ Delta Protection Commission
_____ Education, Department of
_____ S Energy Commission
_____ S Fish & Game Region # Fresno
_____ Food & Agriculture, Department of
_____ General Services, Department of
_____ Health Services, Department of
_____ Housing & Community Development
_____ Integrated Waste Management Board
_____ Native American Heritage Commission

_____ San Gabriel & Lower L.A. Rivers and Mtns Conservancy
_____ San Joaquin River Conservancy
_____ Santa Monica Mountains Conservancy
_____ State Lands Commission
_____ SWRCB: Clean Water Grants
_____ SWRCB: Water Quality
_____ SWRCB: Water Rights
_____ Tahoe Regional Planning Agency
_____ Toxic Substances Control, Department of
_____ S Water Resources, Department of

_____ S Other So. San Joaquin Arch. Info. Ctr.
_____ S Other DOGGR - Bakersfield

Local Public Review Period (to be filled in by lead agency)

Starting Date September 10, 2019 Ending Date October 10, 2019

Lead Agency (Complete if applicable):

Consulting Firm: _____ Applicant: _____
Address: _____ Address: _____
City/State/Zip: _____ City/State/Zip: _____
Contact: _____ Phone: _____
Phone: _____

Signature of Lead Agency Representative: Randall Cates **Date:** September 10, 2019

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

INITIAL STUDY/NOTICE OF PREPARATION

AVEP Solar Project

by Chaparral Solar, LLC, Rabbitbrush Solar, LLC, and Tumbleweed Solar, LLC

Chaparral Site:

Specific Plan Amendment 1, Map 231-18; Specific Plan Amendment 2, Map 231-18;
Specific Plan Amendment 25, Map 232; Specific Plan Amendment 26, Map 232;
Zone Change Case 3, Map 231-18; Zone Change Case 40, Map 232;
Conditional Use Permit 1, Map 231-18; Conditional Use Permit 33, Map 232;
Conditional Use Permit 34, Map 232;
Nonsummary Vacation, Map 232 (Chaparral Site)

Rabbitbrush Site:

Specific Plan Amendment 27, Map 232; Specific Plan Amendment 28, Map 232;
Zone Change Case 41, Map 232
Conditional Use Permit 35, Map 232; Conditional Use Permit 36, Map 232
Nonsummary Vacation, Map 232 (Rabbitbrush Site)

Tumbleweed Site:

Specific Plan Amendment 29, Map 232; Specific Plan Amendment 30, Map 232
Zone Change Case 42, Map 232;
Conditional Use Permit 37, Map 232;
Conditional Use Permit 38, Map 232;
Nonsummary Vacation, Map 232 (Tumbleweed Site)

PP18141
PLN18-01976

LEAD AGENCY:



Kern County Planning and Natural Resources Department
2700 M Street, Suite 100
Bakersfield, CA 93301-2370

Contact: Mr. Randall Cates
(661) 862-8612
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September 2019



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1.0 Project Description

1.1 Project Location

The proposed AVEP Solar Project (proposed project), which consists of the Chaparral, Rabbitbrush, and Tumbleweed Solar sites (individually a “facility” or collectively “facilities”), would develop three photovoltaic (PV) solar facilities and associated infrastructure necessary to generate a combined total of approximately 375 megawatts (MW) of renewable electrical energy including associated energy storage systems on approximately 2,117 acres of privately owned land. The proposed project consists of three solar facilities: Chaparral Solar Facility, Rabbitbrush Solar Facility, and Tumbleweed Facility.

The proposed project would be built either collectively at the same time or alternatively as three approximately 125-MW facilities on the approximately 764-acre Chaparral site, 632-acre Rabbitbrush site, and the 721-acre Tumbleweed site as commercial contracts are entered for each. Each of the facilities is independent of the other and, therefore, not connected pursuant to CEQA; however, they are being considered together for the purposed of efficient environmental and entitlement review. Depending upon market conditions, the Chaparral, Rabbitbrush, and Tumbleweed facilities may also each include or be developed with an energy storage system (ESS) with the capacity to store up to 500 megawatt-hours (MWh) energy. Each ESS would be located on approximately five acres of land within the facility. There are five potential interconnection routes, as described below in **Table 1, Potential Interconnection Options**.

TABLE 1 - POTENTIAL INTERCONNECTION OPTIONS

Option 1	Power generated by the proposed project would be transferred via proposed collection lines, and then via an existing 230kV gen-tie line to the SCE Whirlwind Substation.
Option 2A (Alternative 1)	<p><u>If the Tumbleweed Solar substation is not constructed:</u> Power generated by the Tumbleweed site would be transferred to the proposed Chaparral Solar substation. This would utilize collection lines that feed into the Chaparral Solar substation and then into the LADWP Rosamond switching station as seen in Figure 12, Project Boundary/LADWP Interconnection (Option 2A).</p> <p>Power generated by the Tumbleweed site would travel north along the proposed collection line, towards the Chaparral Solar facility. Once this collection line enters the boundaries of the Chaparral site, it may or may not share the structures (pole or H-Frame) with Rabbitbrush Solar and travel east along Rosamond Boulevard, then run parallel with Chaparral Solar collection line crossing LADWP Parcel and connecting to the proposed Chaparral Substation.</p> <p>Power generated by the Chaparral site would travel to the Chaparral Substation via collection line as shown on Figure 12, Project Boundary/LADWP Interconnection (Option 2A).</p> <p>Power generated by the Rabbitbrush site would travel to the Chaparral Substation via collection line as shown on Figure 12, Project Boundary/LADWP Interconnection (Option 2A).</p>



<p>Option 2A (Alternative 2)</p>	<p><u>If the Tumbleweed Solar substation is not constructed:</u> Power generated by the Tumbleweed site would be transferred to the proposed Chaparral Solar substation. This would utilize collection lines that feed into the Chaparral Solar substation and then into the LADWP Rosamond switching station as seen in Figure 12, Project Boundary/LADWP Interconnection (Option 2A).</p> <p>Once the collection line enters the boundaries of the Chaparral site, it may or may not share the structures (pole or H-Frame) with Rabbitbrush Solar then travel east along Rosamond Boulevard, then travel northeast along the existing LADWP transmission line easement before making a perpendicular crossing over the LADWP Parcel and enter the Chaparral Substation, then sharing one gen-tie line with Rabbitbrush and Chaparral Solar which interconnects to the proposed LADWP Rosamond switching station.</p> <p>Power generated by the Chaparral site would travel to the Chaparral Substation via collection line as shown on Figure 12, Project Boundary/LADWP Interconnection (Option 2A).</p> <p>Power generated by the Rabbitbrush site would travel to the Chaparral Substation via collection line as shown on Figure 12, Project Boundary/LADWP Interconnection (Option 2A).</p>
<p>Option 2B (Alternative 1)</p>	<p><u>If the Tumbleweed Solar substation is constructed:</u> Power generated by the Tumbleweed site would be transferred to the proposed Tumbleweed Solar substation. A gen-tie line would interconnect directly to the LADWP Rosamond switching station as seen in Figure 13, Project Boundary/LADWP Interconnection (Option 2B).</p> <p>Power generated by the Tumbleweed site would travel north along the proposed gen-tie line, towards the Chaparral Solar facility. Once this gen-tie line enters the boundaries of the Chaparral site, it will then travel east along Rosamond Boulevard before crossing the road and entering the proposed LADWP Rosamond switching station.</p> <p>Power generated by the Chaparral site would travel to the Chaparral Substation via collection line as shown on Figure 13, Project Boundary/LADWP Interconnection (Option 2B).</p> <p>Power generated by the Rabbitbrush site would travel to the Chaparral Substation via collection line as shown on Figure 13, Project Boundary/LADWP Interconnection (Option 2B).</p>
<p>Option 2B (Alternative 2)</p>	<p><u>If the Tumbleweed Solar substation is constructed:</u> Power generated by the Tumbleweed site would be transferred to the proposed Tumbleweed Solar substation. A gen-tie line would interconnect directly to the LADWP Rosamond switching station as seen in Figure 13, Project Boundary/LADWP Interconnection (Option 2B).</p> <p>Once the gen-tie line enters the boundaries of the Chaparral site, it will then travel east along Rosamond Boulevard travel northeast along the existing LADWP transmission line easement before making a perpendicular crossing over the LADWP Parcel towards south and crossing the road and entering the proposed LADWP Rosamond switching station.</p> <p>Power generated by the Chaparral site would travel to the Chaparral Substation via collection line as shown on Figure 13, Project Boundary/LADWP Interconnection (Option 2B).</p>



Power generated by the Rabbitbrush site would travel to the Chaparral Substation via collection line as shown on **Figure 13, Project Boundary/LADWP Interconnection (Option 2B)**.

The proposed project is located within Sections 9, 10, 12, 13, 14, 15, 25, 26, and 36, Township 9 North, Range 14 West San Bernardino Base and Meridian (SBB&M), and Section 18, Township 9 North, Range 13 West (SBB&M). The proposed project is in the eastern high desert region of unincorporated Kern County. The proposed project is in the western extent of the Mojave Desert near Mojave, California. The proposed project is generally bordered by Avenue of the Stars to the north, 100th Street West and a transmission line easement utilized by the Los Angeles Department of Water and Power to the east, Avenue A to the south, and 130th Street West to the west.

Land uses in the region include a mix of undeveloped land, agriculture, residential, recreational and public facilities, and renewable energy projects (solar and wind). Desert vegetation dominates the proposed project sites and region. Topography across the proposed project sites is relatively flat. The major north-south route in the region is State Route 14, a four-lane highway located approximately 8 miles east of the proposed project. The major east-west route near the proposed project is State Route 58, a four-lane highway located approximately 9.5 miles north of the proposed project. Other roads serving the project include Rosamond Boulevard, Gaskell Road, 110th Street West, 120th Street West, and 130th Street West. Paved and unpaved roadways generally following section lines are found throughout the area.

The Assessor Parcel Numbers (APNs) are summarized in **Table 2, Project Assessor Parcel Numbers, Corresponding Map Codes, Zoning, and Acreage**. **Figure 1, Site Vicinity**, shows the regional location of the proposed project and **Figure 2, Project Boundary**, depicts the proposed boundary of the project.

TABLE 2 - PROJECT ASSESSOR PARCEL NUMBERS, CORRESPONDING MAP CODES, ZONING, AND ACREAGE.

Solar Facility Site	APN	Willow Springs Specific Plan - Existing Map Code Designation(s)	Willow Springs Specific Plan - Proposed Map Code Designation(s)	Existing Zone District(s)	Proposed Zone Districts	Acres
Chaparral Site	358-030-07	5.3/4.4, 5.3/4.4/2.1	8.1, 8.1/2.1	A FPS, A GH FPS	A FPS, A GH FPS	40
	358-030-08	5.3/4.4, 5.3/4.4/2.1	8.1, 8.1/2.1	A FPS, A GH FPS	A FPS, A GH FPS	40
	358-030-09	5.3/4.4, 5.3/4.4/2.1	8.1, 8.1/2.1	A FPS, A GH FPS	A FPS, A GH FPS	41
	358-030-10	5.3/4.4, 5.3/4.4/2.1	8.1, 8.1/2.1	A FPS, A GH FPS	A FPS, A GH FPS	41
	358-030-11	5.3/4.4	8.1	A FPS	A FPS	37
	358-030-12	5.3/4.4	8.1	A FPS	A FPS	41
	358-030-14	5.3/4.4	8.1	A FPS	A FPS	41
	358-030-15	5.3/4.4	8.1	A FPS	A FPS	41
	358-030-16	5.3/4.4	8.1	A FPS	A FPS	41
	358-030-17	5.3/4.4	8.1	A FPS	A FPS	41
	358-030-19	5.3/4.4	8.1	A FPS	A FPS	40
	358-030-22	5.3/4.4	8.1	A FPS	A FPS	26



Solar Facility Site	APN	Willow Springs Specific Plan -	Willow Springs Specific Plan -	Existing Zone District(s)	Proposed Zone Districts	Acres
		Existing Map Code Designation(s)	Proposed Map Code Designation(s)			
	358-030-23	5.3/4.4	8.1	A FPS	A FPS	41
	358-030-24	5.3/4.4	8.1	A FPS	A FPS	41
	358-152-25	5.3/4.4	8.1	A FPS, E(2 ½) RS FPS	A FPS	40
	358-152-26	5.6	8.1	E(2 ½) RS FPS	A FPS	10
	358-152-27	5.6	8.1	E(2 ½) RS FPS	A FPS	10
	358-030-30	6.2	8.1	E(2 ½) RS FPS	A FPS	10
	358-030-33	6.2	8.1	E(2 ½) RS FPS	A FPS	32
	358-152-39	5.6	8.1	E(2 ½) RS FPS	A FPS	10
	358-152-40	5.6	8.1	E(2 ½) RS FPS	A FPS	10
	358-390-09	5.3/4.4, 5.3/4.4/2.1	8.1, 8.1/2.1	A FPS, A GH FPS	A FPS, A GH FPS	40
	358-390-16	5.3/4.4, 5.3/4.4/2.1	8.1, 8.1/2.1	A FPS, A GH FPS	A FPS, A GH FPS	40
	252-341-48 (a portion thereof)	5.3/4.4	8.1	E(2 ½) RS FPS	A FPS	10
Chaparral Site Total Acreage						764
Rabbitbrush Site	358-010-04	5.7	8.1	E(5) RS FPS	A FPS	40
	358-010-13	8.5	8.1	A FPS	A FPS	80
	358-010-14	8.5	8.1	A FPS	A FPS	80
	358-010-17	8.5	8.1	A FPS	A FPS	20
	358-010-18	8.5	8.1	A FPS	A FPS	20
	358-010-19	8.5	8.1	A FPS	A FPS	40
	358-030-05	8.5	8.1	A FPS	A FPS	40
	358-030-06	8.5	8.1	A FPS	A FPS	40
	358-030-26	8.5	8.1	A FPS	A FPS	20
	358-030-27	8.5	8.1	A FPS	A FPS	20
	358-030-28	8.5	8.1	A FPS	A FPS	20
	358-030-29	8.5	8.1	A FPS	A FPS	20
	358-141-34	5.75	8.1	E(10) RS FPS	A FPS	5
	358-152-03	5.6	8.1	E(2 ½) RS FPS	A FPS	21
	358-152-54	5.6	8.1	E(2 ½) RS FPS	A FPS	3
	358-152-55	5.6	8.1	E(2 ½) RS FPS	A FPS	3



Solar Facility Site	APN	Willow Springs Specific Plan - Existing Map Code Designation(s)	Willow Springs Specific Plan - Proposed Map Code Designation(s)	Existing Zone District(s)	Proposed Zone Districts	Acres
	358-152-56	5.6	8.1	E(2 ½) RS FPS	A FPS	3
	358-152-57	5.6	8.1	E(2 ½) RS FPS	A FPS	3
	358-152-58	5.6	8.1	E(2 ½) RS FPS	A FPS	11
	358-160-01	5.6	8.1	E(5) RS FPS	A FPS	10
	358-160-02	5.6	8.1	E(5) RS FPS	A FPS	10
	358-160-07	5.3/4.4	8.1	E(5) RS FPS	A FPS	20
	358-160-08	5.3/4.4	8.1	E(5) RS FPS	A FPS	20
	358-160-09	5.6	8.1	E(5) RS FPS	A FPS	10
	358-160-10	5.6	8.1	E(5) RS FPS	A FPS	10
	358-160-13	5.6	8.1	E(5) RS FPS	A FPS	10
	358-160-14	5.6	8.1	E(5) RS FPS	A FPS	10
	358-160-21	5.6	8.1	E(5) RS FPS	A FPS	3
	358-160-24	5.6	8.1	E(5) RS FPS	A FPS	5
	358-160-25	5.6	8.1	E(5) RS FPS	A FPS	3
	358-160-26	5.6	8.1	E(5) RS FPS	A FPS	3
	358-160-27	5.6	8.1	E(5) RS FPS	A FPS	3
	358-160-29	5.6	8.1	E(5) RS FPS	A FPS	3
	358-160-30	5.6	8.1	E(5) RS FPS	A FPS	5
	358-160-31	5.6	8.1	E(5) RS FPS	A FPS	5
	358-360-04	5.75	8.1	E(10) RS FPS	A FPS	10
	358-360-05	5.75	8.1	E(10) RS FPS	A FPS	3
Rabbitbrush Site Total Acreage						632
Tumbleweed Site	359-031-07	8.1/2.85	8.1/2.85	A FPS	A FPS	80
	359-032-08	5.6/2.8	8.1/2.8	E(2 ½) RS FPS	A FPS	15
	359-032-13	5.6/2.8	8.1/2.8	E(2 ½) RS FPS	A FPS	80
	359-032-14	5.6/2.8	8.1/2.8	E(2 ½) RS FPS	A FPS	105
	359-032-20	8.1/2.8	8.1/2.8	A FPS	A FPS	81
	359-032-21	8.1/2.8	8.1/2.8	A FPS	A FPS	80
	359-032-27	6.2, 5.6/2.8	8.1, 8.1/2.8	E(2 ½) RS FPS	A FPS	20
	359-032-28	5.6/2.8	8.1/2.8	E(2 ½) RS FPS	A FPS	20
	359-032-34	5.6/2.8	8.1/2.8	E(2 ½) RS FPS	A FPS	11
	359-032-35	5.6/2.8	8.1/2.8	E(2 ½) RS FPS	A FPS	31



Solar Facility Site	APN	Willow Springs Specific Plan - Existing Map Code Designation(s)	Willow Springs Specific Plan - Proposed Map Code Designation(s)	Existing Zone District(s)	Proposed Zone Districts	Acres
	359-032-36	8.1/2.8	8.1/2.8	A FPS	A FPS	19
	359-032-37	6.2	8.1	A FPS	A FPS	19
	359-032-38	8.1/2.8	8.1/2.8	A FPS	A FPS	120
	359-183-02	5.3/2.85, 5.6/2.85	8.1/2.85	E(2 ½) RS FPS	A FPS	40
Tumbleweed Site Total Acreage						721
Proposed Solar Project Total Acreage						2,117

Legend

- 5.3 (Maximum 10 units/net acre)
- 5.6 (Minimum 2.5 gross acres/unit)
- 5.7 (Minimum 5 gross acres/unit)
- 5.75 (Minimum 10 gross acres/unit)
- 6.2 (General Commercial)
- 8.1 (Intensive Agriculture (Minimum 20-acre Parcel Size))
- 8.5 (Resources Management (Minimum 20-acre parcel size))
- 2.1 Seismic Hazard Overlay
- 2.8 Military Flight Operations (60db) Overlay
- 2.85 Noise Management Area (65db) Overlay
- 4.4 Comprehensive Planning Area
- A (Exclusive Agriculture)
- E(2½) (Estate 2½ Acres)
- E(5) (Estate 5 Acres)
- E(10) (Estate 10 Acres)
- FPS (Floodplain Secondary Combining)
- GH (Geologic Hazard Combining)



1.2 Environmental Setting

The proposed project is located on approximately 2,117 acres of undeveloped, privately owned land located in the western extent of the Mojave Desert, approximately 5.5 miles west of the unincorporated community of Rosamond, California. The proposed project is in the Mojave Basin and Range ecoregion and the Willow Springs and Little Buttes United States Geological Survey (USGS) 7.5-minute topographical quadrangles. Development in the area surrounding the project sites include rural residences, agriculture, as well as renewable energy (solar and wind) facilities.

The Mojave Creosote Bush Scrub community dominate most of the proposed project sites. This community typically occurs on well-drained soils in alluvial fans, bajadas, and upland slopes. Growth occurs during spring (or rarely in summer or fall) if rainfall is sufficient. This is one of the most widely distributed desert plant communities in the Mojave Desert, occurring from the desert floor up to approximately 3,500 feet in elevation and extending into northwestern Arizona and southern Utah. Scattered, widely spaced Joshua trees occur throughout portions of the creosote bush scrub communities present within Rabbitbrush Solar and Chaparral Solar; however, they do not occur at a density high enough to consider them a distinct woodland community.

The foothills of the Tehachapi Range occur approximately 4.5 miles north of the proposed project, and the Central Transverse Range occurs approximately 12 miles south of the site. The proposed project and surrounding land are mostly flat and exhibit little topographic variation.

The proposed project is located within unincorporated Kern County and is currently designated as Willow Springs Specific Plan map codes:

- 5.3/4.4 (Maximum 10 units/net acre/ Comprehensive Planning Area)
- 5.3/4.4/2.1 (Maximum 10 units/net acre/ Comprehensive Planning Area/ Seismic Hazard)
- 5.3/2.85 (Maximum 10 units/net acre/ Noise Management Area (65db))
- 5.6 (Minimum 2.5 gross acres/unit)
- 5.6/2.8 (Minimum 2.5 gross acres/unit/Military Flight Operations (60db))
- 5.6/2.85 (Minimum 2.5 gross acres/unit/Noise Management Area (65db))
- 5.7 (Minimum 5 gross acres/unit)
- 5.75 (Minimum 10 gross acres/unit)
- 6.2 (General Commercial)
- 8.1/2.8 (Intensive Agriculture (Minimum 20-acre Parcel Size)/Military Flight Operations (60db))
- 8.1/2.85 (Intensive Agriculture (Minimum 20-acre Parcel Size)/Noise Management Area (65db))
- 8.5 (Resources Management (Minimum 20-acre parcel size))

The proposed project sites are within the A FPS (Exclusive Agriculture - Floodplain Secondary Combining), A GH FPS (Exclusive Agriculture – Geologic Hazard Combining – Floodplain Secondary Combining), E(2½) RS FPS (Estate (2½ acres) – Residential Suburban Combining - Floodplain Secondary Combining), E(5) RS FPS (Estate (5 acres) – Residential Suburban Combining - Floodplain Secondary Combining), and E(10) RS FPS (Estate 10 acres – Residential Suburban Combining - Floodplain Secondary Combining) Zone Districts. The existing and proposed Willow Springs Specific Plan map code designations are shown in **Figure 5, Existing Willow Springs Specific Plan Designations**, and **Figure 6, Proposed Willow Springs Specific Plan Designations**, respectively. The existing land uses of the project and its surroundings are listed in **Table 3, Project Sites and Surrounding Land Uses**, below.



The entire project is also subject to the provisions of the Kern County Zoning Ordinance and is zoned as specified in Table 2, *Project Assessor Parcel Numbers*, and depicted in **Figure 7**, *Existing Zoning*, and **Figure 8**, *Proposed Zoning*. **Figure 9**, *Amendment to Willow Springs Specific Plan Circulation Plan*, shows those future road reservations proposed to be eliminated, as requested by SPA 2, Map 231-18; SPA 26, Map 232; SPA 28, Map 232; and SPA 30, Map 232.

The proposed project is located entirely within the Federal Emergency Management Agency (FEMA) designated Flood Zone (see **Figure 3**, *Flood Zone Map*). There are several drainage routes on the proposed project sites. All drainage routes are isolated episodic or ephemeral waters, which typically only flow for brief periods in response to rainfall.

Based on a review of records maintained by the California Department Conservation/Division of Oil, Gas and Geothermal Resources (DOGGR), wells were not identified on the proposed project sites, and the proposed project is not within the jurisdictional boundaries of an oilfield (DOC 2017).

The proposed project would be served by the Kern County Sheriff's Office for law enforcement and public safety. The closest sheriff station is the Rosamond Station, located approximately 6.5 miles east of the project, at 3179 35th Street West in Rosamond. The Kern County Fire Department (KCFD) provides fire protection and emergency medical and rescue services for the project area. The closest KCFD fire station is located approximately 6.5 miles east of the project at 3219 35th Street West in Rosamond. The closest school is Tropico Middle School, located approximately 4.5 miles east of the project. The nearest hospital is the Adventist Health Tehachapi Valley Hospital, located approximately 18 miles to the northwest in Tehachapi.

The nearest airports to the project sites are the privately owned Rosamond Skypark approximately 5.5 miles to the east, the Mojave Air and Space Port approximately 15 miles to the northeast, and the Mountain Valley Airport (a private airport which allows private access) approximately 15 miles to the north. None of the project site or associated infrastructure, including gen-tie lines, is located within any airport influence area.

According to the California Department of Conservation (DOC) 2016 Farmland Mapping and Monitoring Program designations, the proposed project is designated "Grazing Land", "Nonagricultural and Natural Vegetation", "Prime Farmland", "Farmland of Statewide Importance", "Vacant or Disturbed Land" and "Semi-Agricultural and Rural Commercial Land" (DOC 2016). Parcels within the project boundary and in the vicinity are not subject to a Williamson Act Land Use contract. A portion of the Tumbleweed site is currently under cultivation (i.e., orchards).



TABLE 3 - PROJECT SITES AND SURROUNDING LAND USES

	Existing Land Use	Existing Map Code Designation	Existing Zoning Classification
Chaparral Facility Site	Undeveloped, residential dwelling	5.3/4.4, 5.3/4.4/2.1, 5.6, 6.2	A FPS, A GH FPS, E(2 ½) RS FPS
North	Undeveloped	5.3/4.4, 5.3/4.4/2.1, 5.6/2.1	A FPS, A GH FPS
South	Solar facility, undeveloped	3.3, 5.3, 5.6	A FPS, E (2 ½) RS FPS
East	Undeveloped, sparse residential dwellings	3.3, 5.3/4.4, 5.6	A FPS, E (2 ½) RS FPS
West	Undeveloped	5.3/4.4, 5.3/4.4/2.1, 5.6, 8.5, 8.5/2.1	A FPS, E (2 ½) RS FPS
Rabbitbrush Facility Site	Undeveloped residential dwelling	5.3/4.4, 5.6, 5.7, 5.75, 8.5	A FPS, E (2 ½) RS FPS, E (5) RS FPS, E (10) RS FPS,
North	Undeveloped	5.7, 5.75, 8.5	A FPS, GH FPS, E (10) RS FPS
South	Solar facility	5.3, 5.3/4.4	A FPS
East	Undeveloped, sparse residential dwellings	5.3/4.4, 5.6, 5.7	E (2 ½) RS FPS, E (5) RS FPS
West	Undeveloped, sparse residential dwellings, solar facility	5.3, 5.75	A FPS, E (10) RS FPS
Tumbleweed Facility Site	Agricultural, undeveloped, sparse residential dwellings	5.3/2.85, 5.6/2.8, 5.6/2.85 6.2, 8.1/2.8, 8.1/2.85	A FPS, A GH FPS, E(2 ½) RS FPS
North	Approved Solar Facility, sparse residential dwellings	5.3/2.85, 5.6/2.85, 8.1/2.85	A FPS, E (1) RS FPS, E (2 ½) RS FPS
South	Undeveloped	Los Angeles County	Los Angeles County
East	Undeveloped, sparse residential dwellings	5.3/2.85, 6.2/2.8, 7.1/4.4, 7.2/4.4, 8.1/2.85	E (2 ½) RS FPS, E (2 ½) RS MH FPS



West	Approved Solar Facility, sparse residential dwellings	5.3/2.8, 5.5/2.8, 5.6/2.85, 8.1/2.85	A FPS, E (2 ½) RS FPS
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Legend

- 3.3 (Other Facilities)
 - 5.3 (Maximum 10 units/net acre)
 - 5.5 (Maximum 1 unit/net acre)
 - 5.6 (Minimum 2.5 gross acres/unit)
 - 5.7 (Minimum 5 gross acres/unit)
 - 5.75 (Minimum 10 gross acres/unit)
 - 6.2 (General Commercial)
 - 7.1 (Light Industrial)
 - 7.2 (Service Industrial)
 - 8.1 (Intensive Agriculture (Minimum 20-acre Parcel Size))
 - 8.5 (Resources Management (Minimum 20-acre parcel size))
 - 2.1 Seismic Hazard Overlay
 - 2.8 Military Flight Operations (60db) Overlay
 - 2.85 Noise Management Area (65db) Overlay
 - 4.4 Comprehensive Planning Area
 - A (Exclusive Agriculture)
 - E(2½) (Estate 2½ Acres)
 - E(5) (Estate 5 Acres)
 - E(10) (Estate 10 Acres)
 - FPS (Floodplain Secondary Combining)
 - GH (Geologic Hazard Combining)
-



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KERN SOLAR AVEP

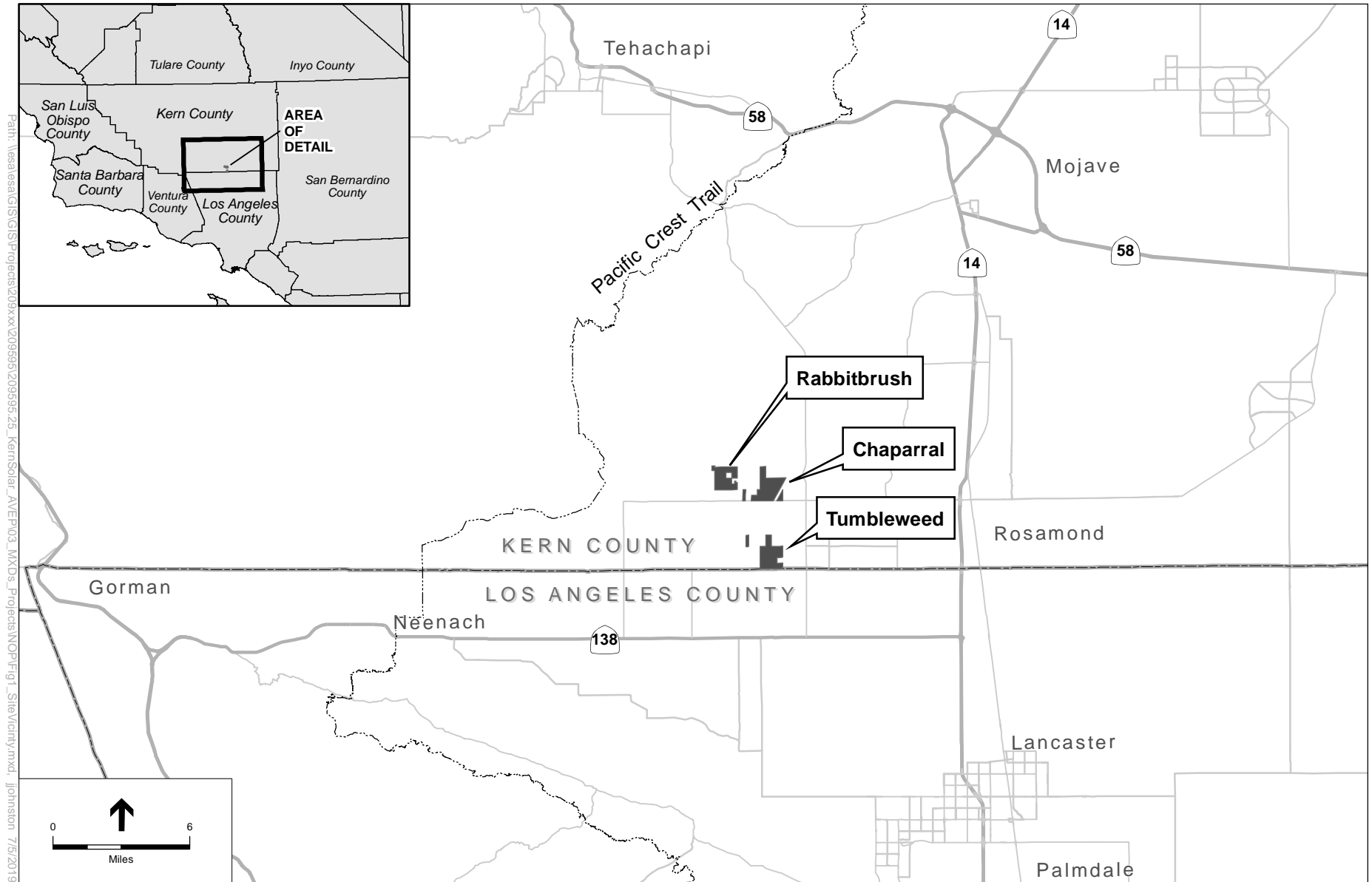


Figure 1: SITE VICINITY



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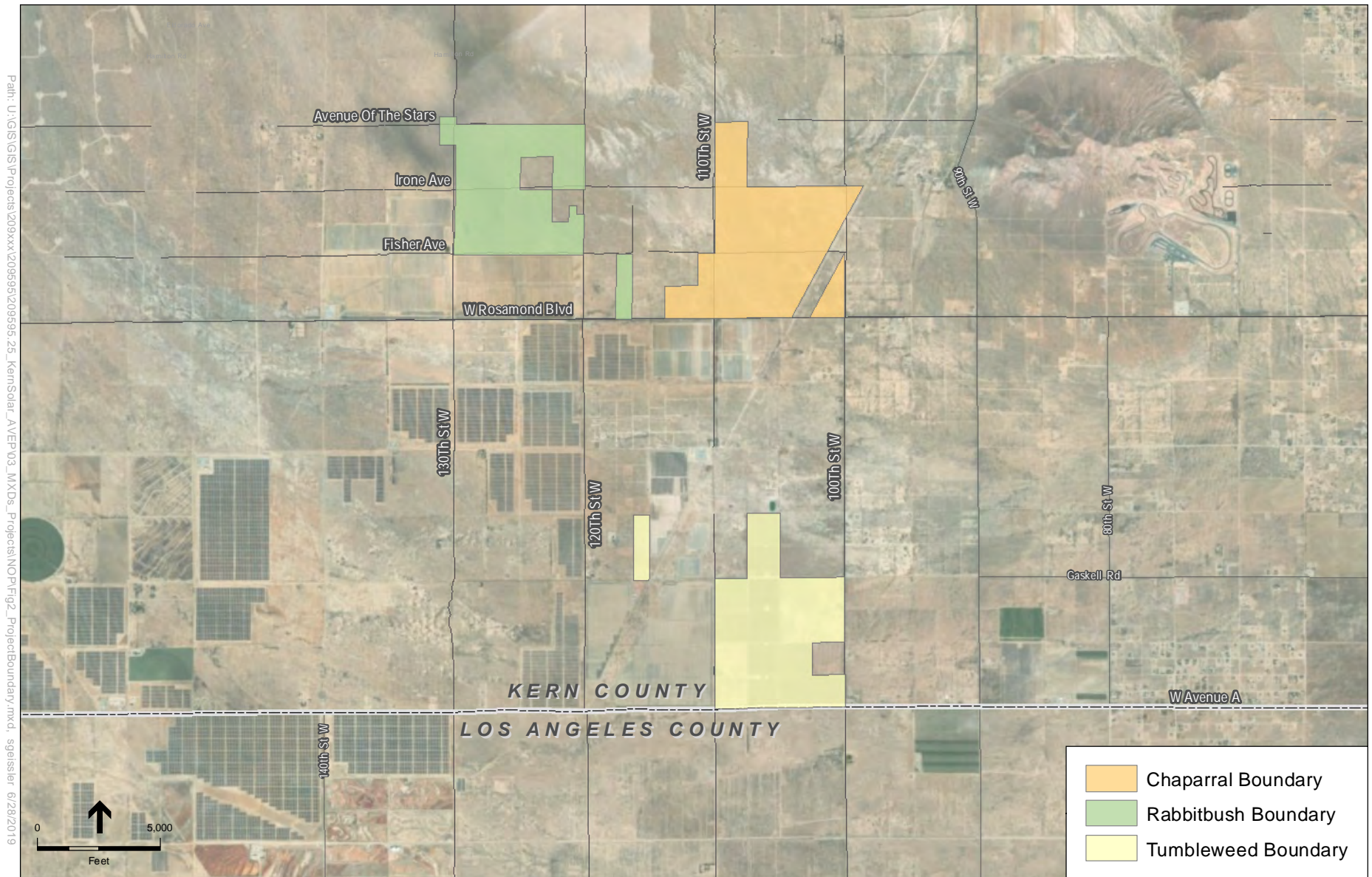


Figure 2: PROJECT BOUNDARY

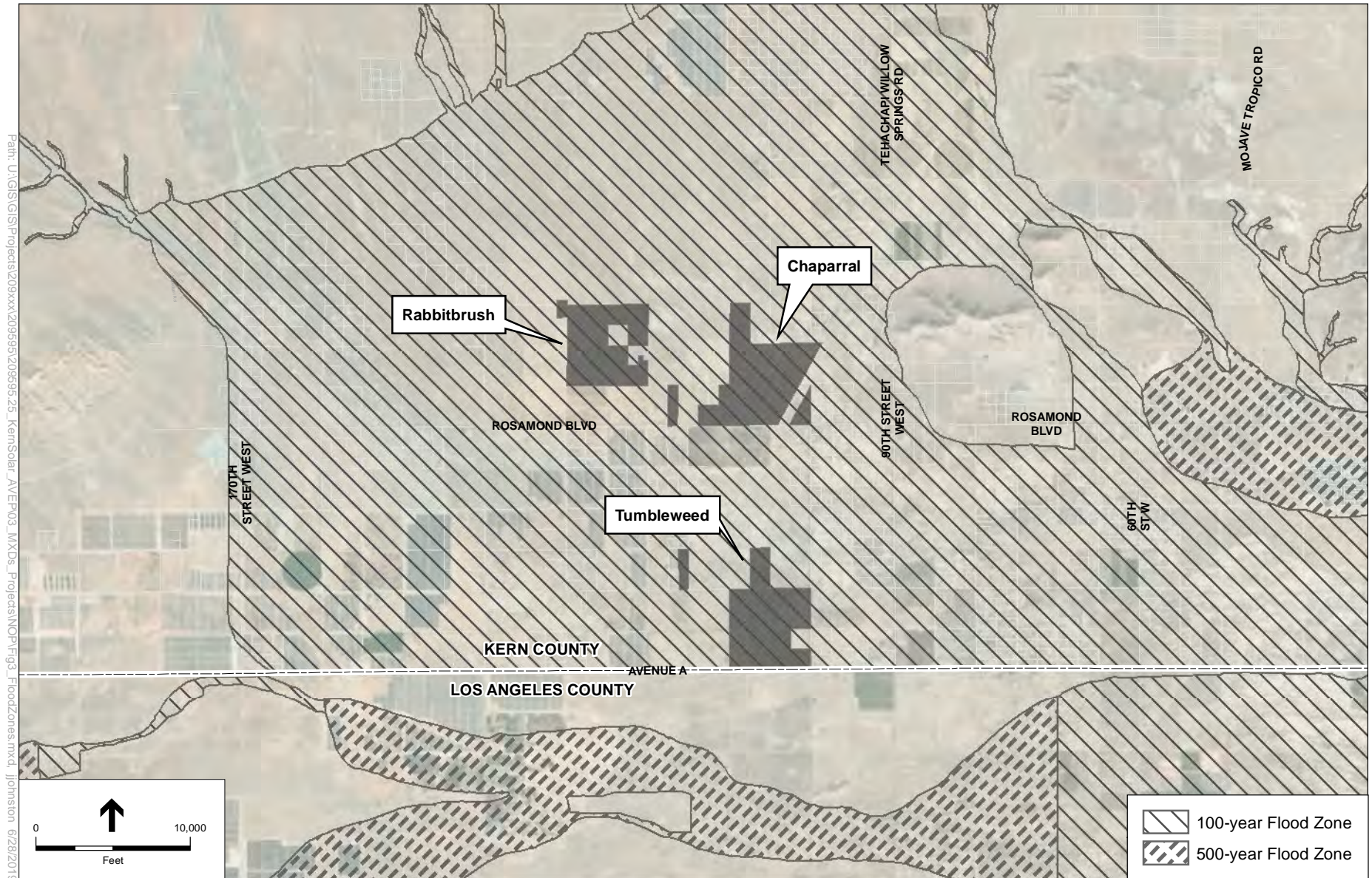


Figure 3: FLOOD ZONE MAP



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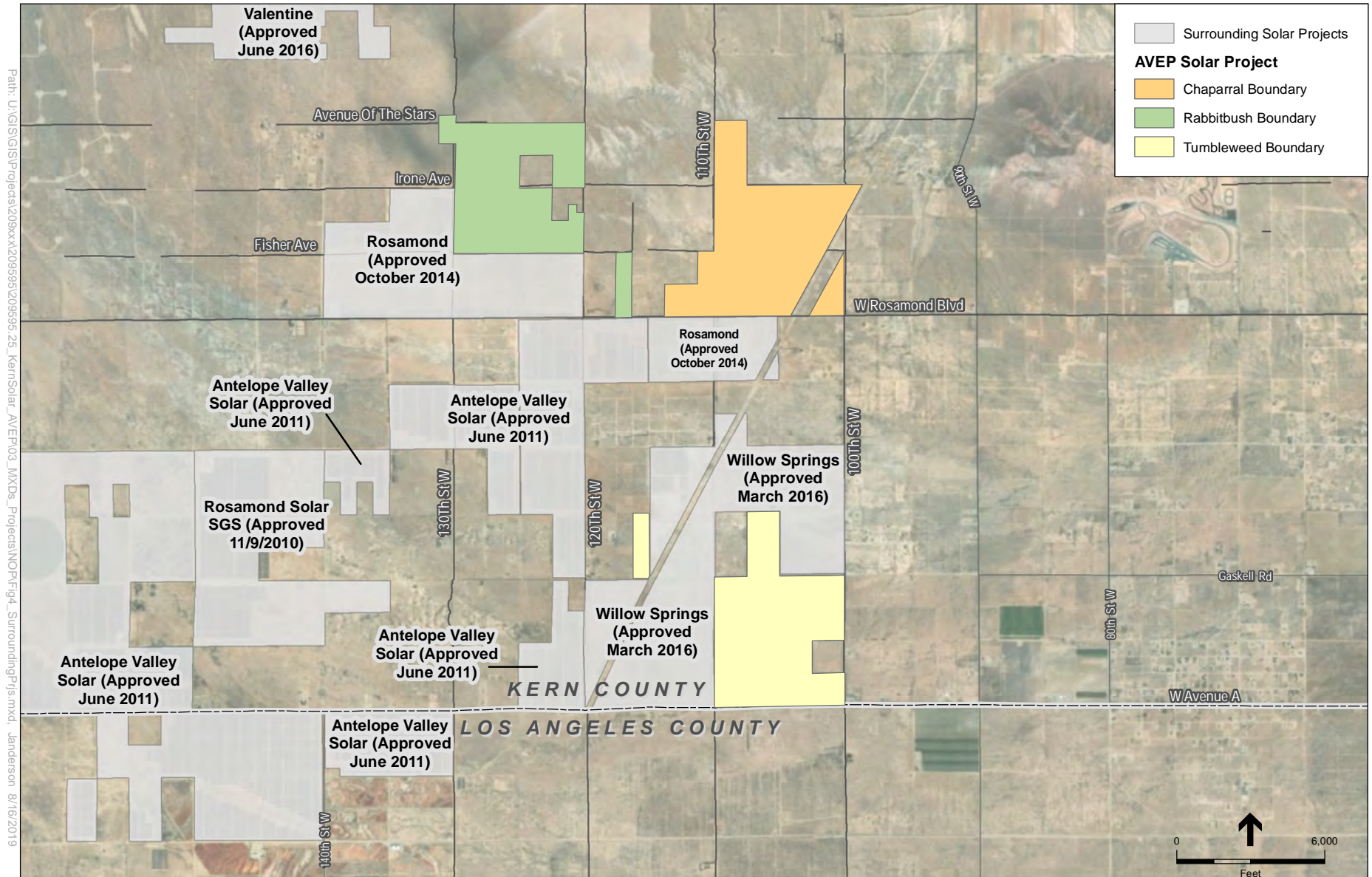


Figure 4: SURROUNDING SOLAR PROJECTS



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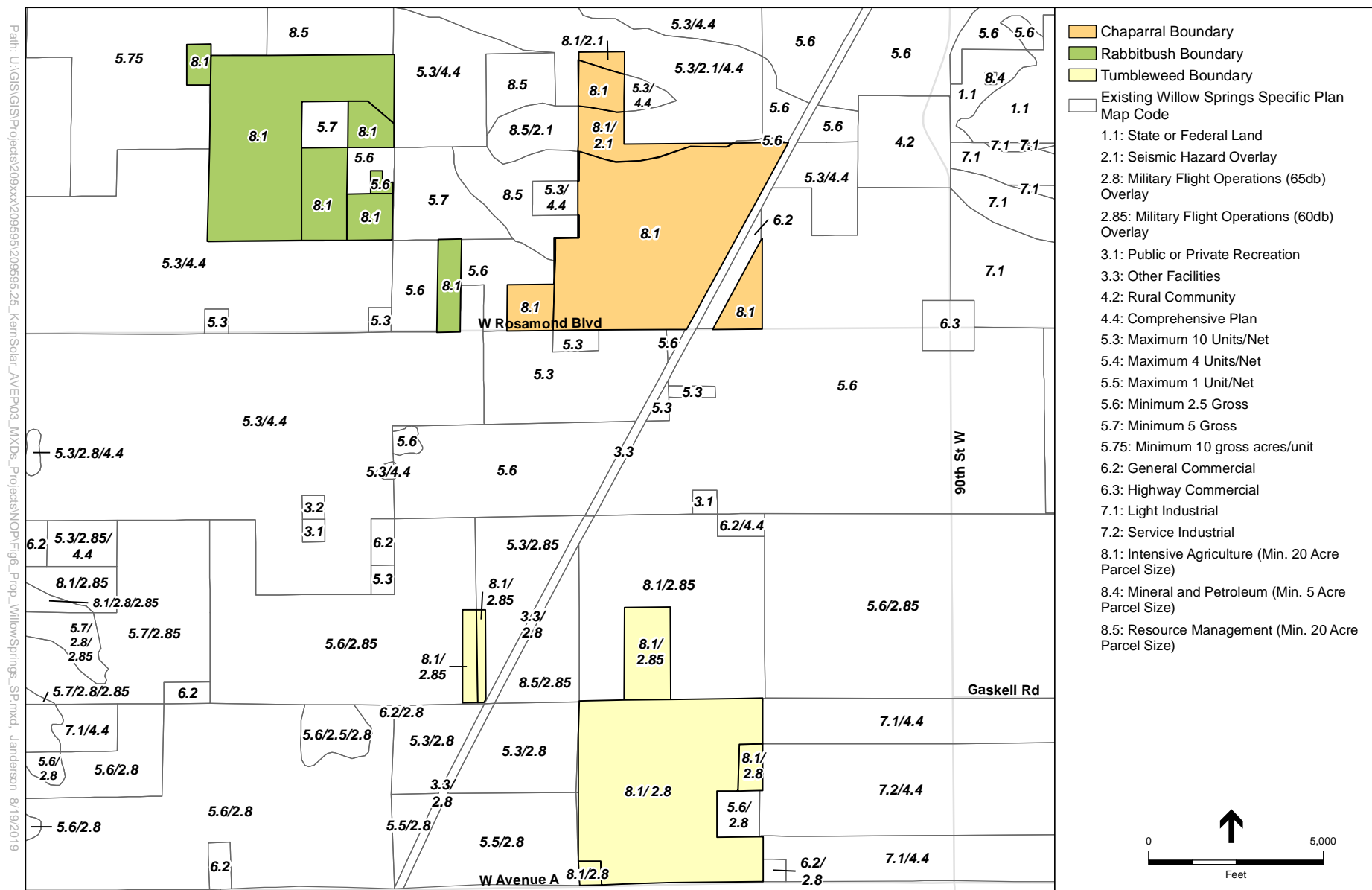


Figure 6: PROPOSED WILLOW SPRINGS SPECIFIC PLAN DESIGNATIONS



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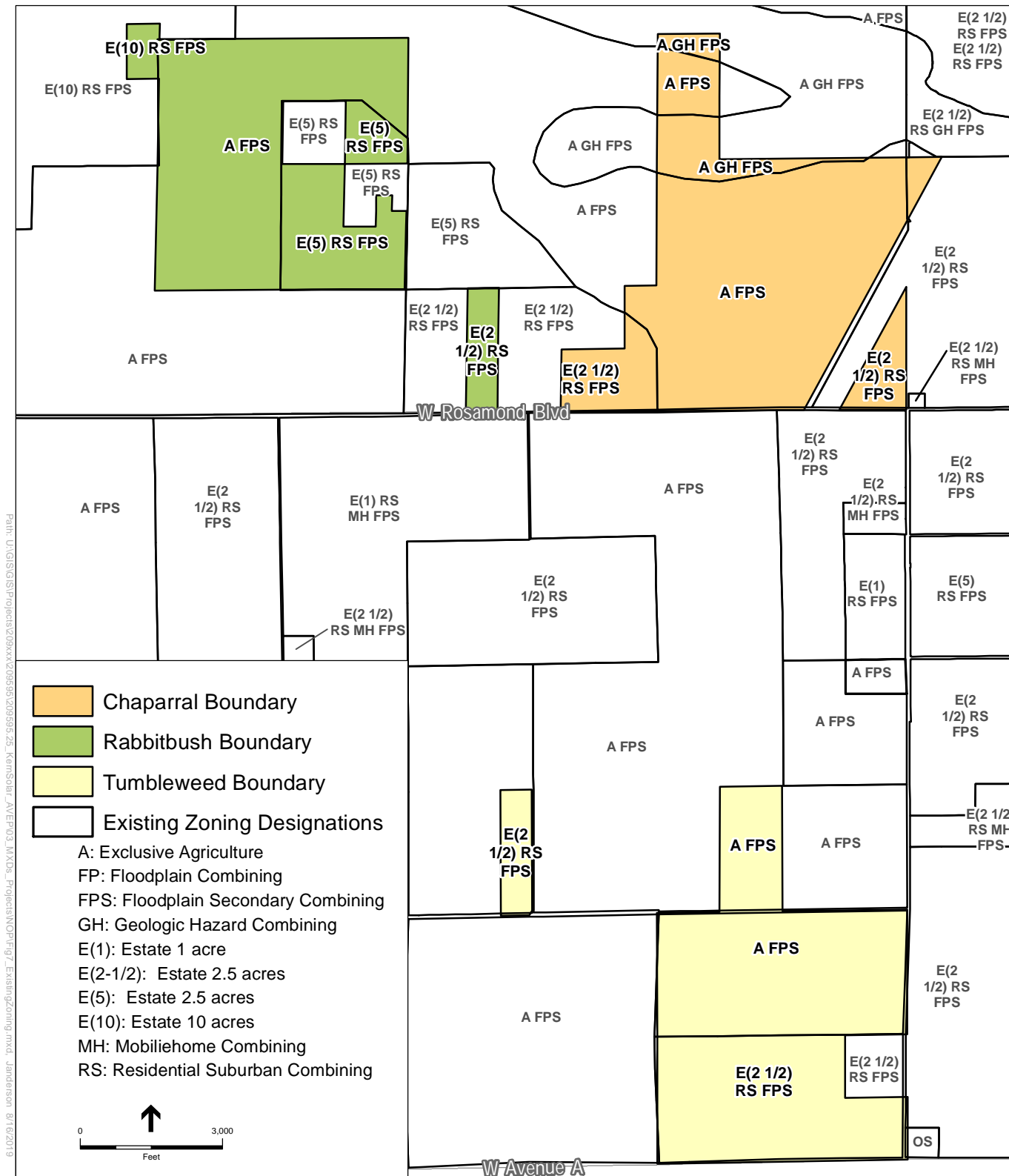


Figure 7: EXISTING ZONING



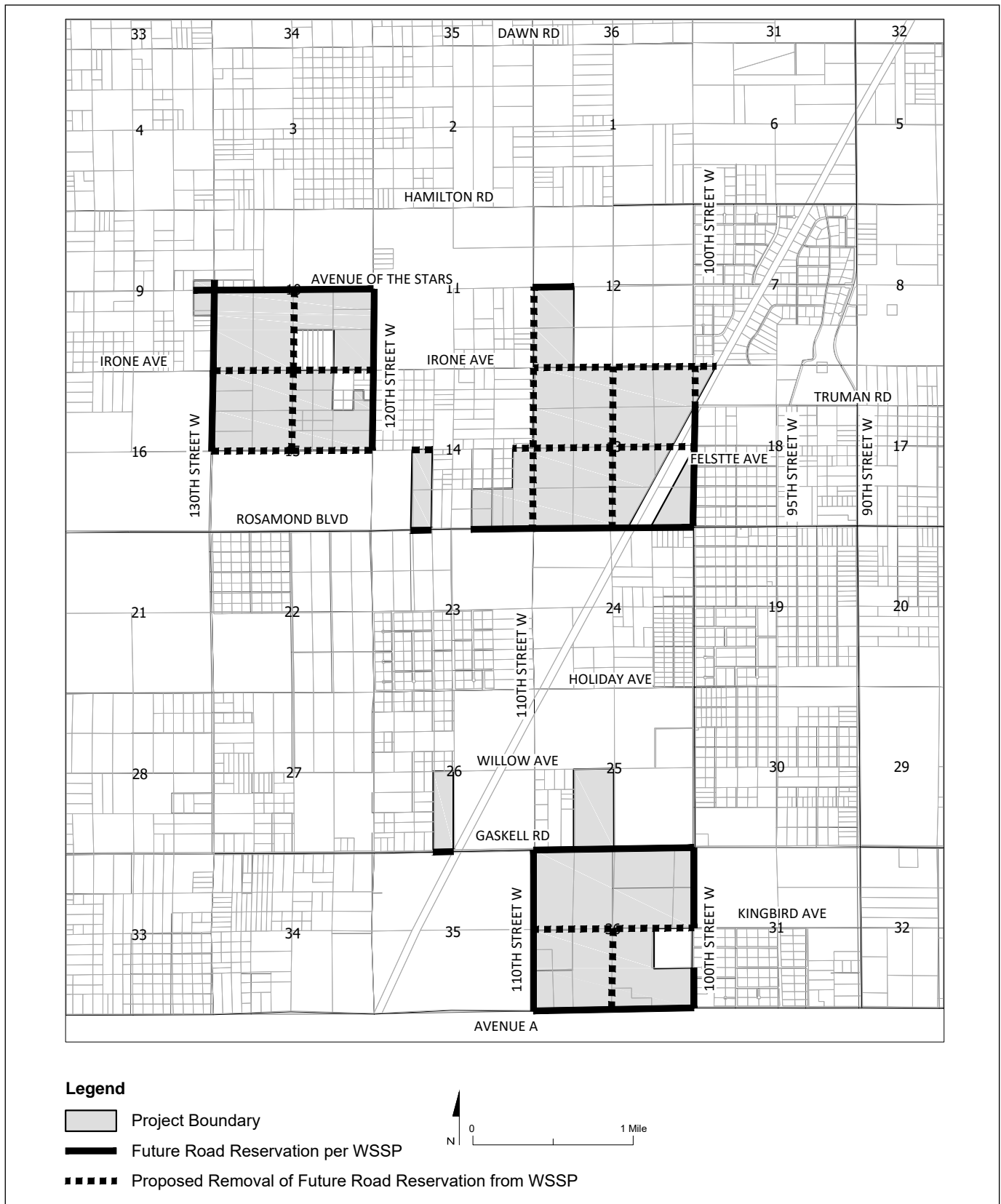


Figure 9: AMENDMENT TO THE WILLOW SPRINGS SPECIFIC PLAN CIRCULATION PLAN, TO ELIMINATE FUTURE ROAD RESERVATIONS

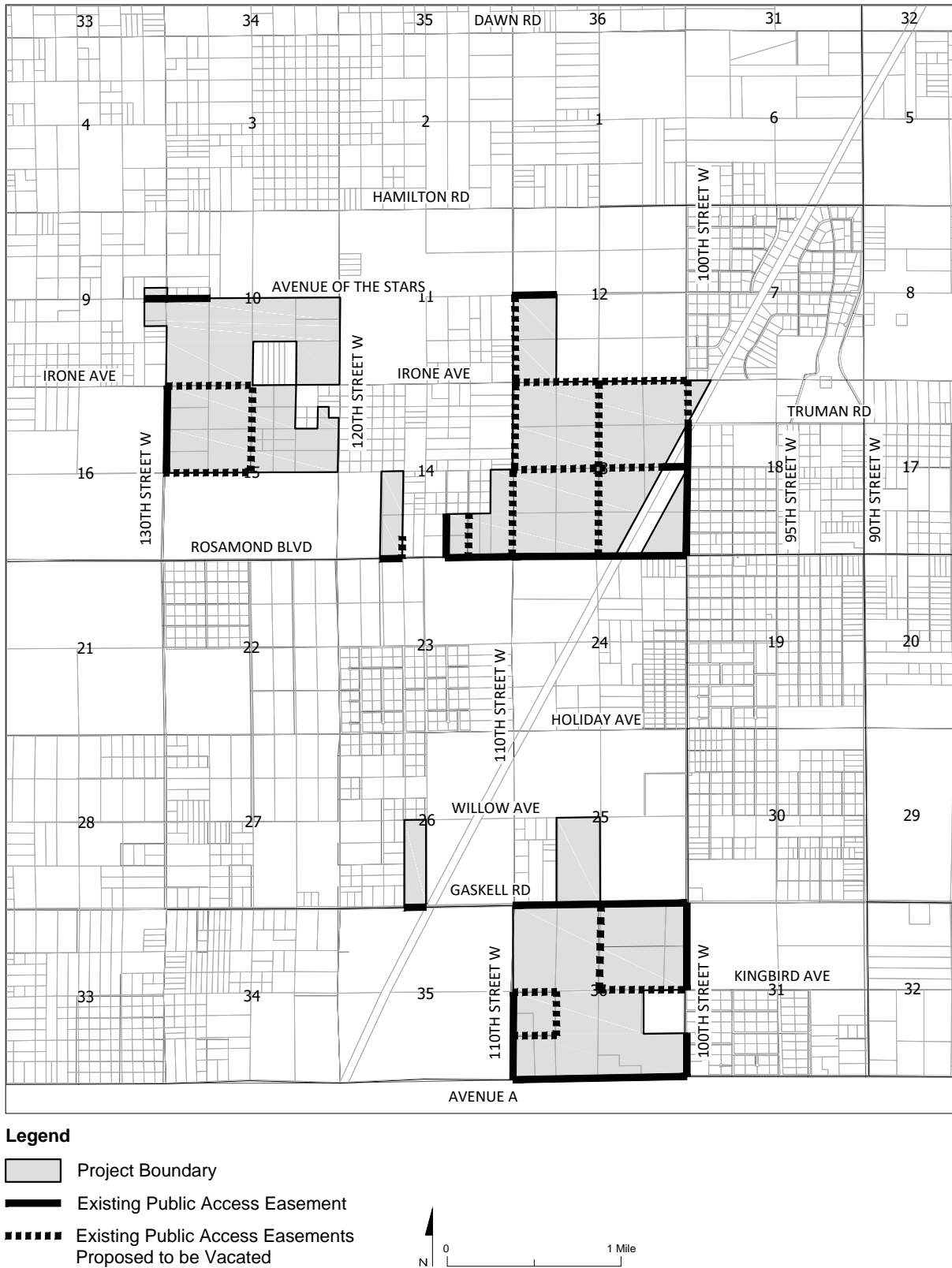


Figure 10: PROPOSED NONSUMMARY VACATION OF PUBLIC ACCESS EASEMENTS



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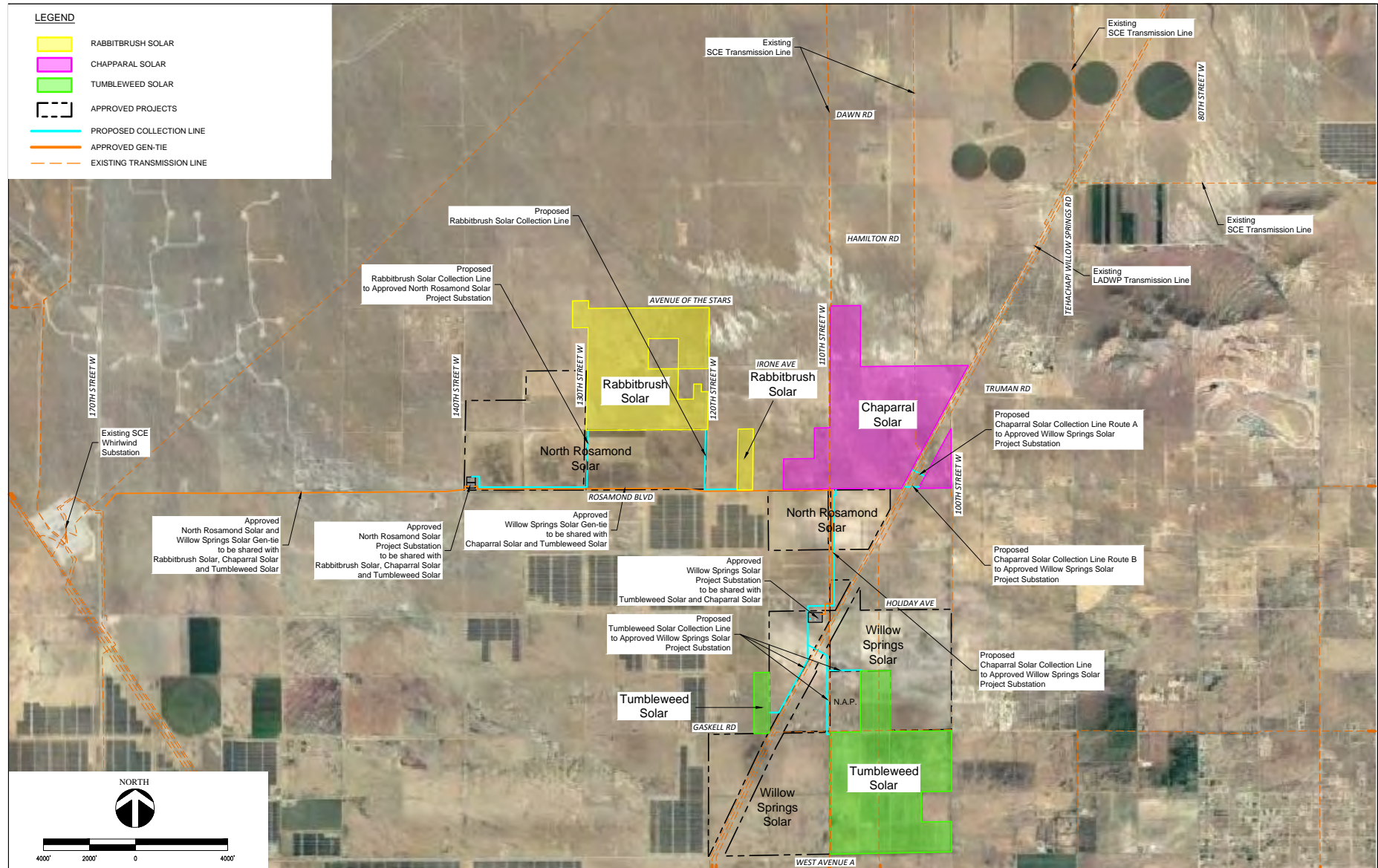


Figure 11: PROJECT BOUNDARY/SCE INTERCONNECTION (OPTION 1)



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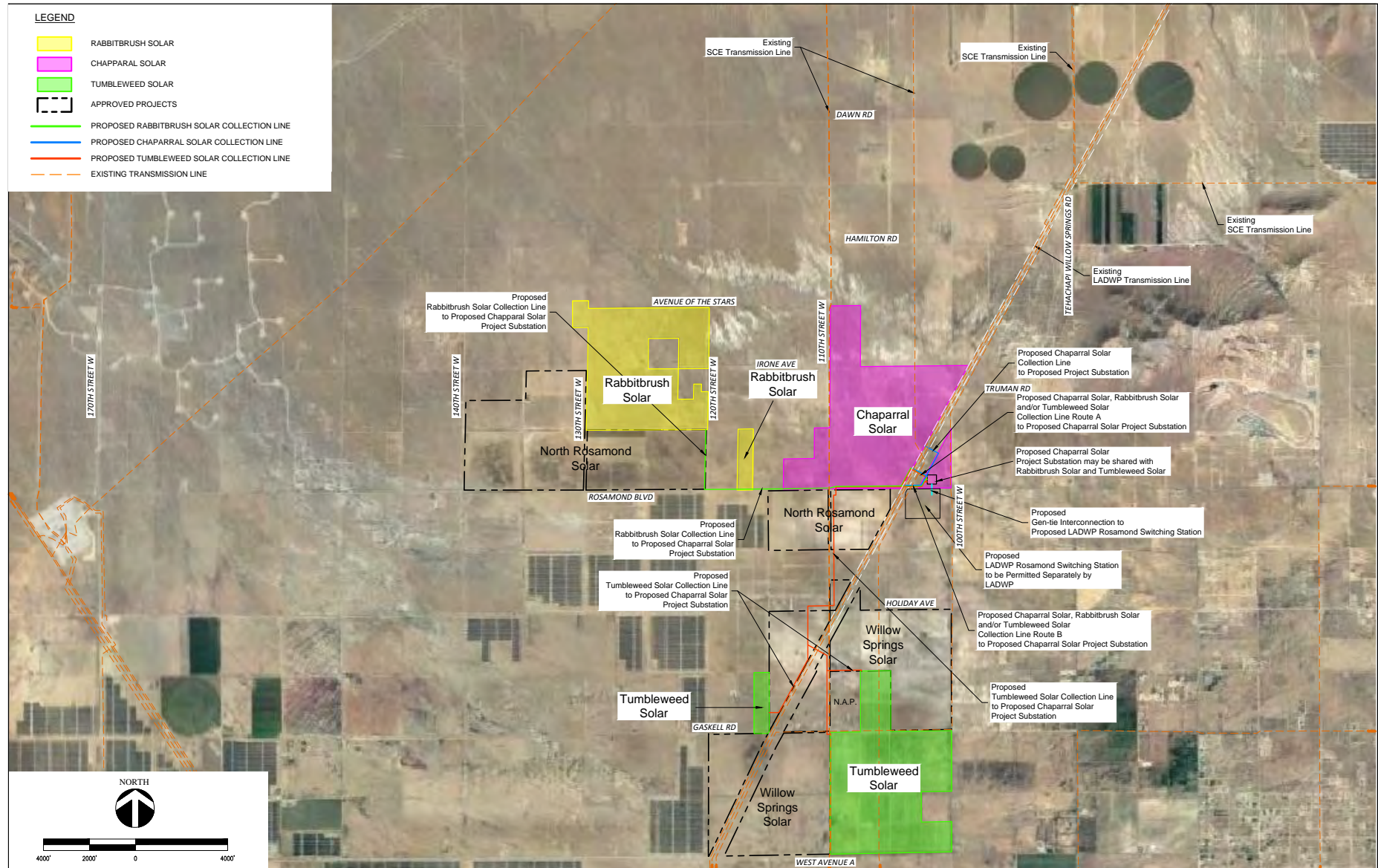


Figure 12: PROJECT BOUNDARY/LADWP INTERCONNECTION (OPTION 2A)



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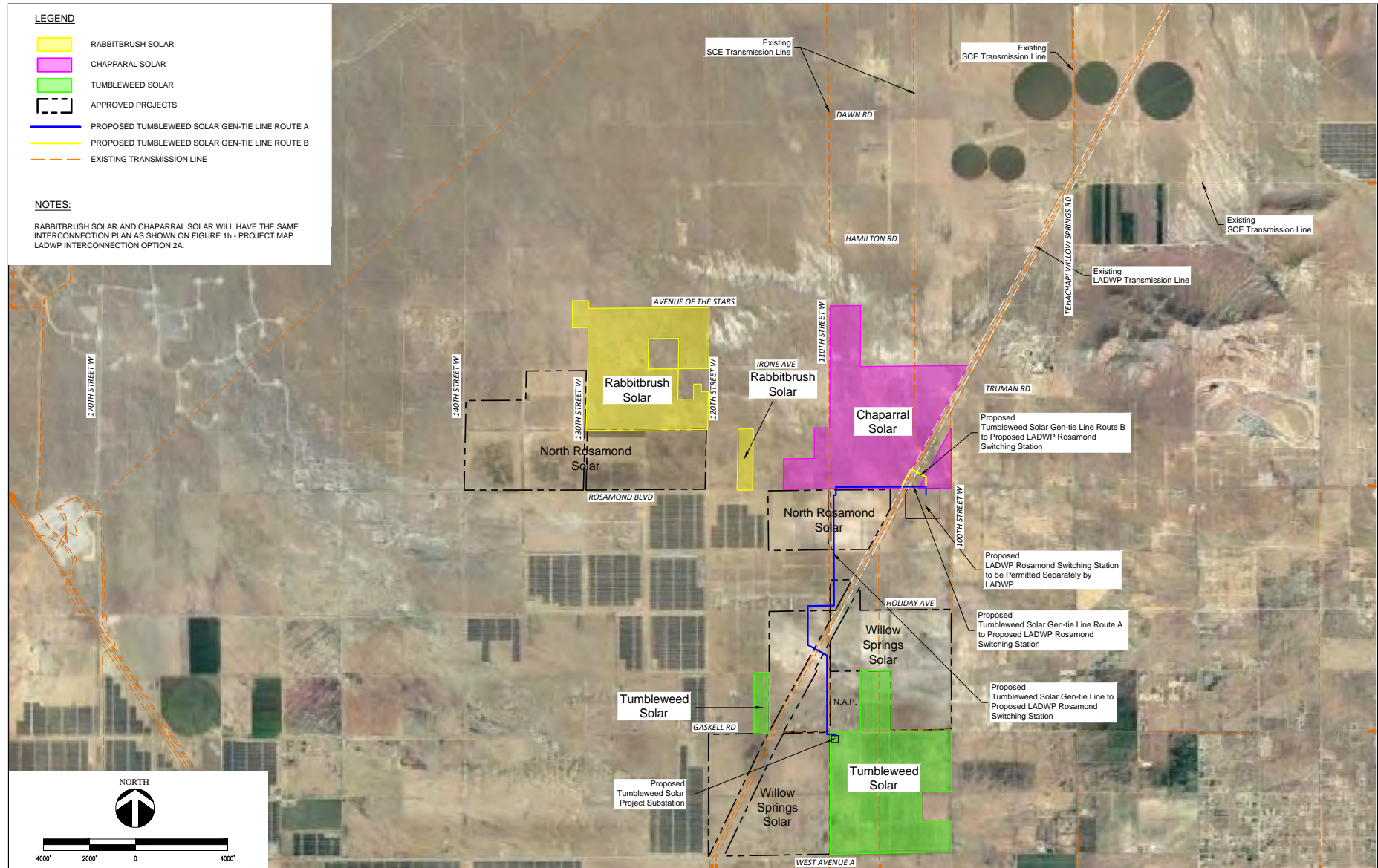


Figure 13: PROJECT BOUNDARY/LADWP INTERCONNECTION (OPTION 2B)



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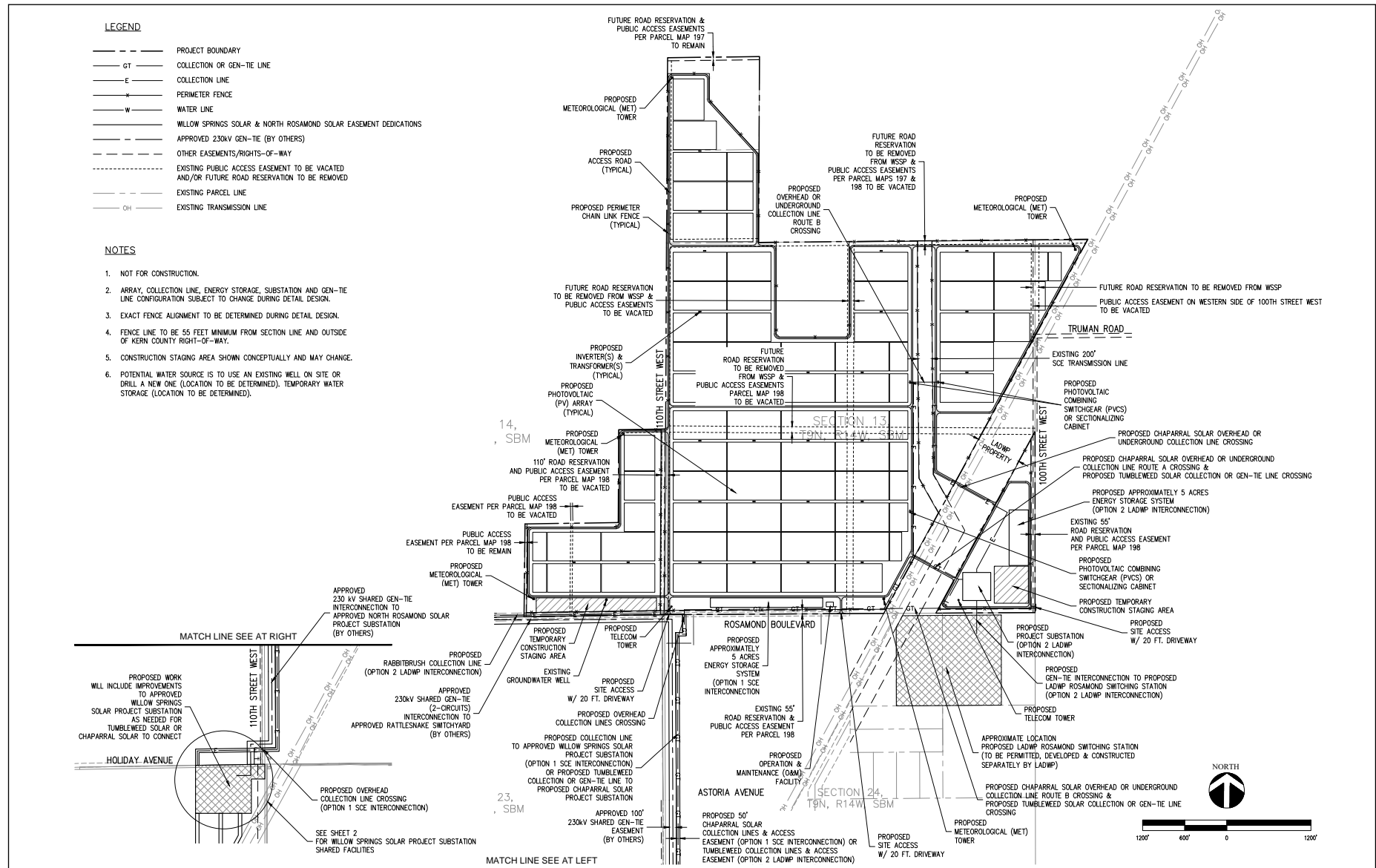


Figure 14: CHAPARRAL FACILITY LAYOUT



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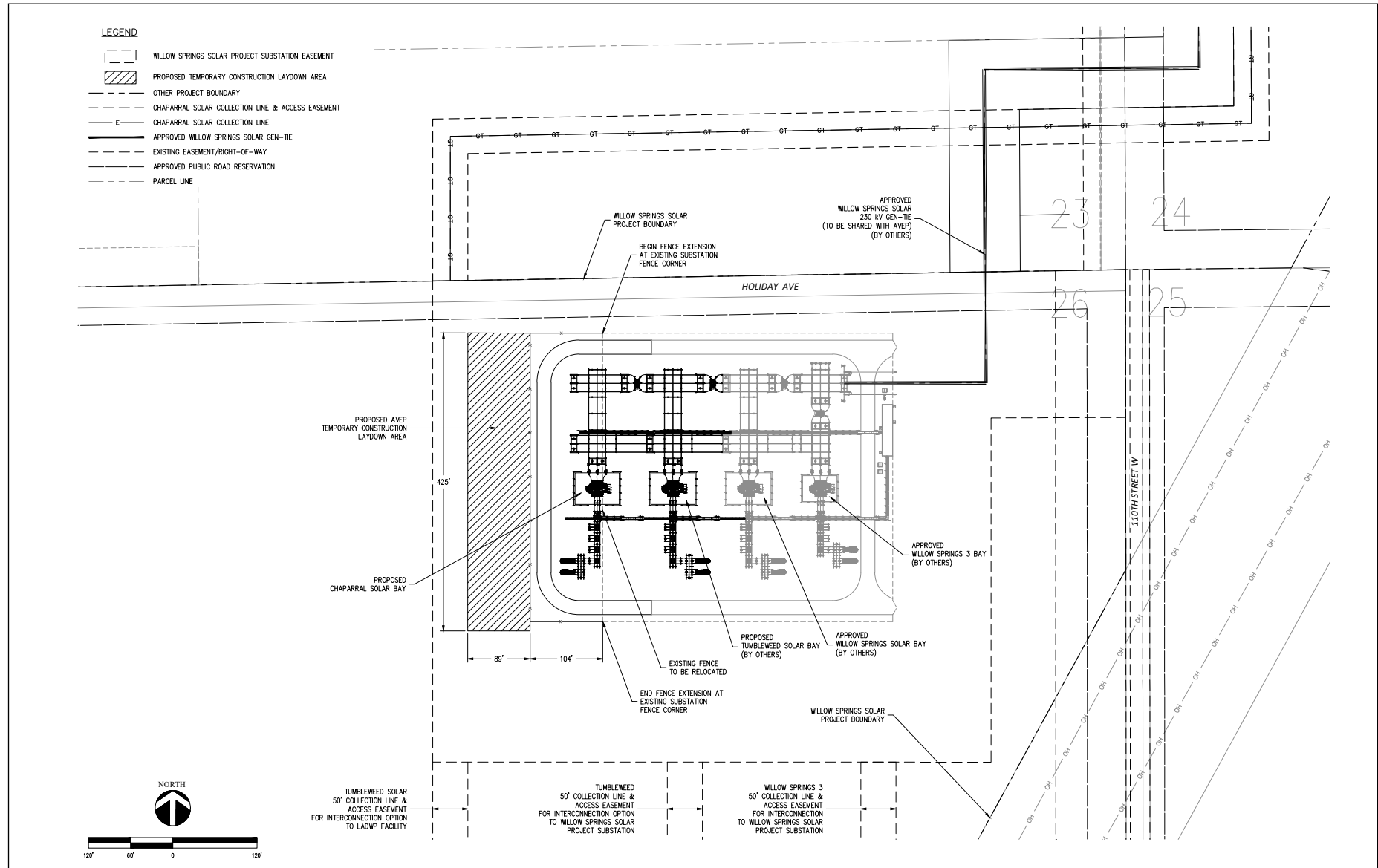


Figure 15: CHAPARRAL SOLAR SITE - WILLOW SPRINGS SUBSTATION SHARED FACILITIES

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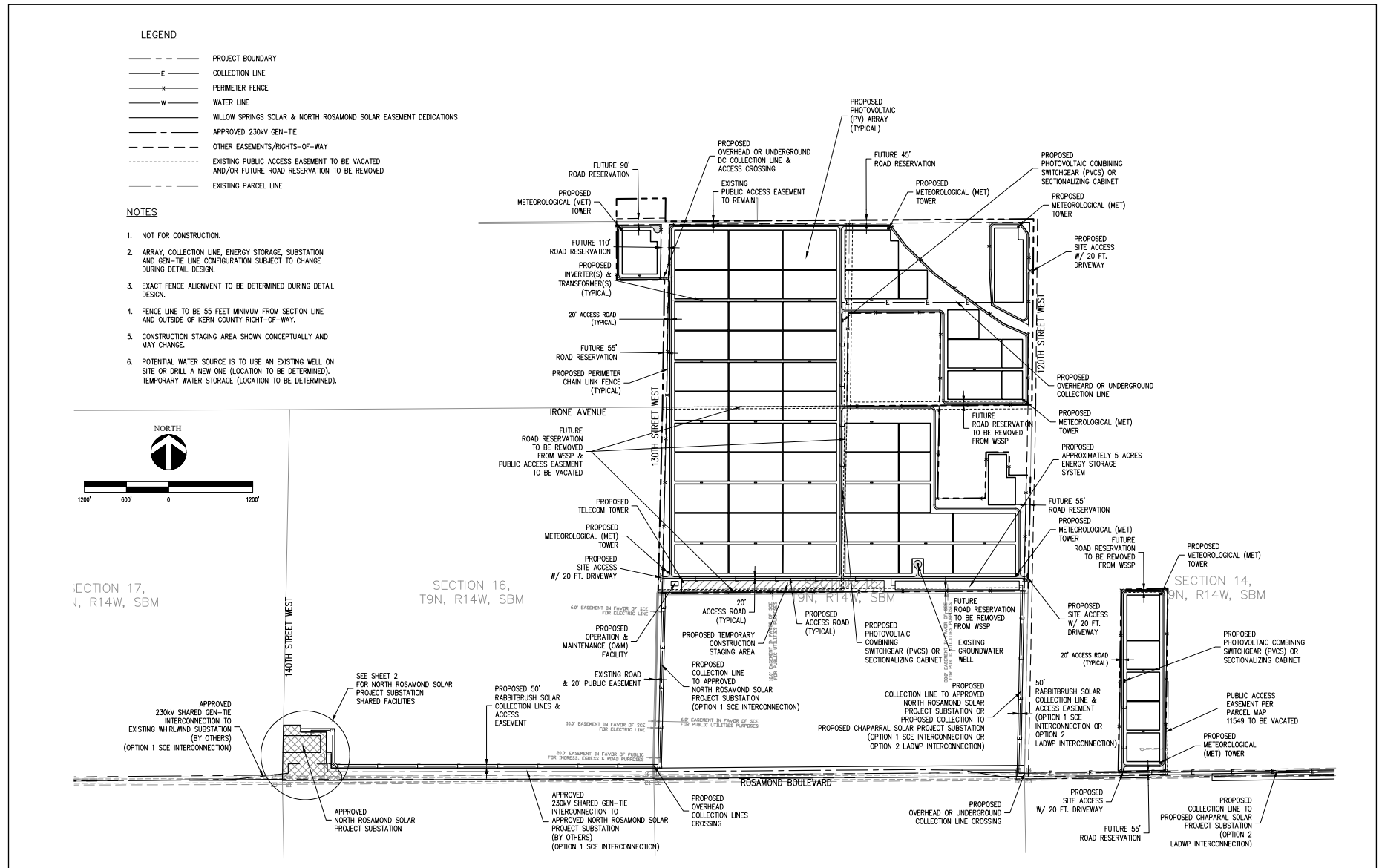


Figure 16: RABBITBRUSH FACILITY LAYOUT



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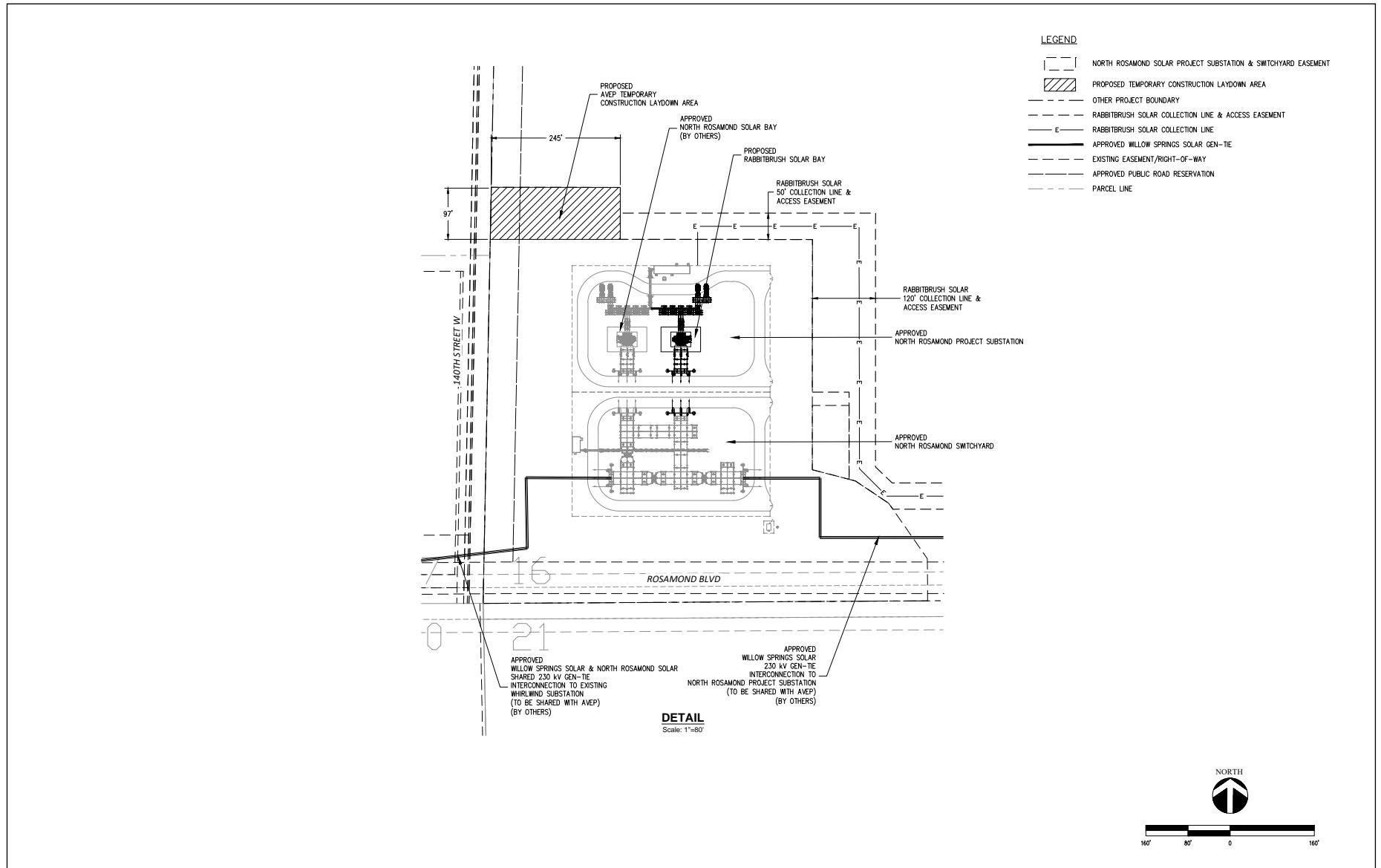


Figure 17: RABBITBRUSH SOLAR SITE - ROSAMOND SUBSTATION SHARED FACILITIES



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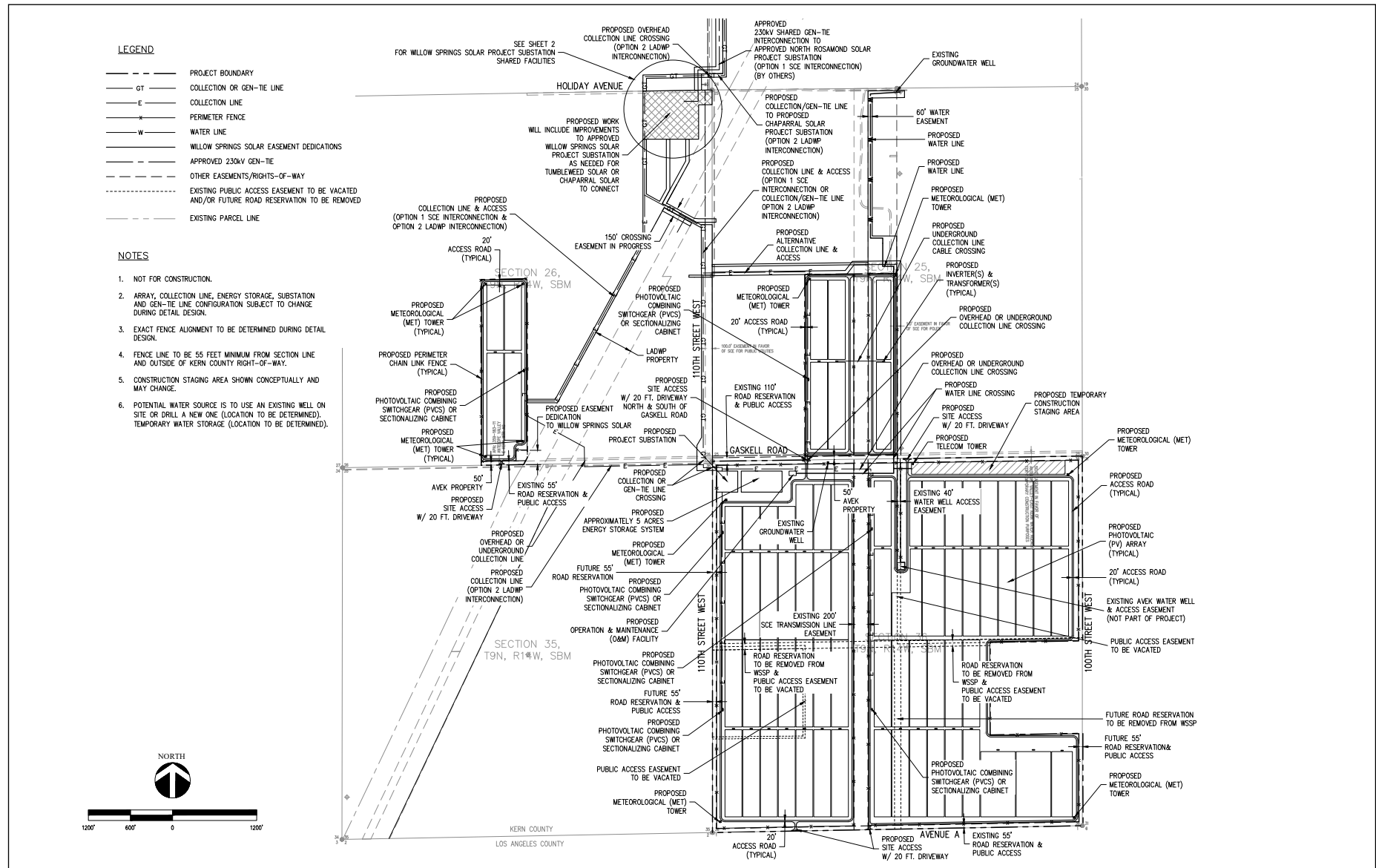


Figure 18: TUMBLEWEED FACILITY LAYOUT



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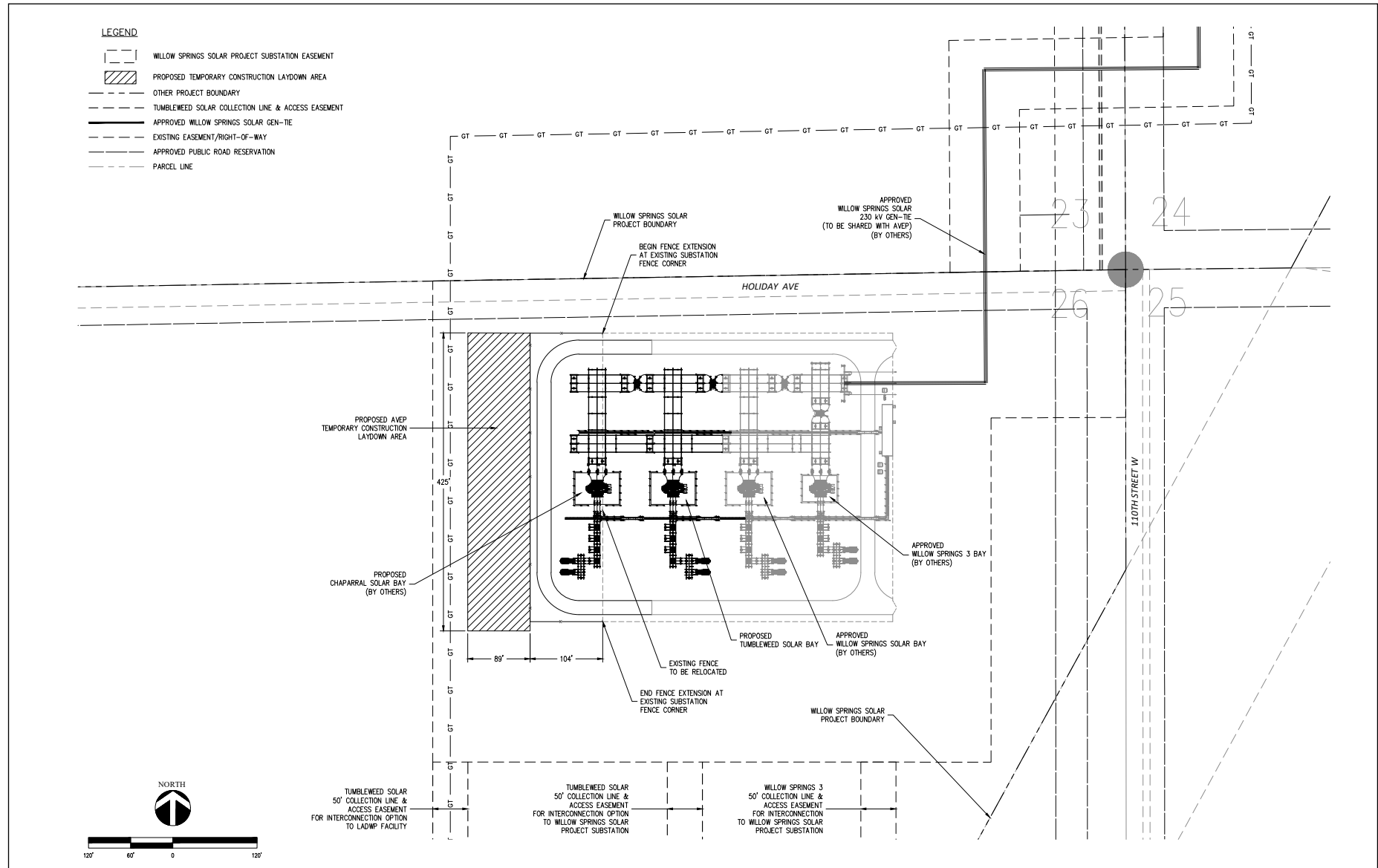


Figure 19: TUMBLEWEED SOLAR SITE - WILLOW SPRINGS SUBSTATION SHARED FACILITIES



1.3 Project Description

Surrounding Land Uses

Existing development in the area includes rural access roads, scattered rural residences, producing and non-producing water wells, off-highway vehicle use, and wind and solar energy. A portion of the Pacific Crest Trail (PCT) is approximately 4.5 miles west of the project site, as shown on **Figure 1, Site Vicinity**.

There are several planned, existing, and permitted solar energy and transmission projects in the region where the project site is located. Surrounding solar projects in the vicinity (as shown on **Figure 4, Surrounding Projects**) include:

- The Antelope Valley Solar Project: abutting a portion of the Rabbitbrush facility on the south side of Rosamond Boulevard, approved in 2010, and currently operational.
- Catalina Renewable Energy Project: approximately 2.5 miles north of the Rabbitbrush facility, approved in 2011, and currently operational.
- Rosamond Solar Project: approximately 2 miles southwest of the Rabbitbrush facility, approved in 2010, and currently operational.
- North Rosamond Solar Project: abutting a portion of the Chaparral facility and the Rabbitbrush facility, approved in 2014, and currently operational.
- Willow Springs Solar Project: abutting the Tumbleweed facility, approved in 2016. Phase 1 is operational, and Phase 2 is under construction.

Project Overview

The proposed project would consist of three PV solar facilities and associated infrastructure necessary to generate a total of approximately 375-MW (approximately 125 MW per each facility) of renewable electrical energy on 2,117 acres of privately owned land in the eastern high desert region of unincorporated Kern County.

The AVEP Solar Project requests approval of the following applications by the County (acreages are approximate)

- a) Chaparral Solar facility (by Chaparral Solar, LLC):
 - SPA 1, Map 231-18 (Specific Plan Amendment from 5.3/4.4 to 8.1). 10 acres.
 - SPA 25, Map 232 (Specific Plan Amendment from 5.3/4.4, 5.3/4.4/2.1, 5.6 and 6.2 to 8.1 and 8.1/2.1). 754 acres.
 - SPA 26, Map 232 (eliminate future road reservations)
 - SPA 2, Map 231-18 (eliminate future road reservations)
 - ZCC 3, Map 231-18 (Zone Change from (E 2 1/2) RS FPS to A FPS). 10 acres.
 - ZCC 40, Map 232 (Zone Change from (E 2 1/2) RS FPS to A FPS). 110 acres.
 - CUP 1, Map 231-18 (solar facility). 754 acres.
 - CUP 33, Map 232 (solar facility). 10 acres.
 - CUP 34, Map 232 (communication tower(s))
 - Nonsummary Vacation, Map 232 (Vacation of public access easement(s)). 32 acres.
- b) Rabbitbrush Solar facility (by Rabbitbrush Solar, LLC):
 - SPA 27, Map 232 (Specific Plan Amendment from 5.3/4.4, 5.6, 5.7, 5.75 and 8.5 to 8.1). 632 acres.



- SPA 28, Map 232 (eliminate future road reservations)
- ZCC 41, Map 232 (Zone Change from E(2 ½) RS FPS, E(5) RS FPS and E(10) RS FPS to A FPS). 222 acres.
- CUP 35, Map 232 (solar facility). 632 acres.
- CUP 36, Map 232 (communication tower(s))
- Nonsummary Vacation, Map 232 (Vacation of public access easement(s)). 9 acres.

c) Tumbleweed Solar facility (by Tumbleweed Solar, LLC):

- SPA 29, Map 232 (Specific Plan Amendment from 5.3/2.85, 5.6/2.8, 5.6/2.85 and 6.2 to 8.1/2.8 and 8.1/2.85). 341 acres.
- SPA 30, Map 232 (eliminate future road reservations)
- ZCC 42, Map 232 (Zone Change from E (2 1/2) RS FPS to A FPS). 321 acres.
- CUP 37, Map 232 (solar facility). 721 acres.
- CUP 38, Map 232 (communication tower(s))
- Nonsummary Vacation, Map 232 (Vacation of public access easement(s)). 12 acres.

The proposed project is located within the jurisdictional boundaries of the Willow Springs Specific Plan (Kern County 1992), and, as previously indicated, is designated as 5.3/2.85, 5.3/4.4, 5.3/4.4/2.1, 5.6, 5.6/2.8, 5.6/2.85, 5.7, 5.75, 6.2, 8.1/2.8, 8.1/2.85, and 8.5 (Kern County 1992) and within the A FPS, A GH FPS, E(2½) RS FPS, E(5) RS FPS, and E(10) RS FPS Zone Districts per the Kern County Zoning Ordinance (Kern County 2017). The proposed project includes four requests to amend the Willow Springs Specific Plan Circulation Plan (SPA 2, Map 231-18; SPA 26, Map 232; SPA 28, Map 232; SPA 30, Map 232) to eliminate the future road reservations as shown on **Figure 9, Amendment to Willow Springs Specific Plan Circulation Plan**. Should the zone change requests be approved as proposed, the entirety of the project would be in the A FPS Zone District, with the exception of portions of the Chaparral Site which would be in the A GH FPS Zone District. Therefore, pursuant to Chapter 19.12.030.G of the Kern County Zoning Ordinance, CUPs are required to allow for the construction and operation of the PV solar facilities, and pursuant to Chapter 19.12.030.F, CUPs are required to allow the construction and operation of communication towers. Four communication towers are proposed, and are described as follows:

- Chaparral site, western tower: maximum proposed height of 100 feet.
- Chaparral site, eastern tower: maximum proposed height of 100 feet.
- Rabbitbrush site tower: maximum proposed height of 100 feet.
- Tumbleweed site tower: maximum proposed height of 100 feet.

As shown in **Table 2, Project Assessor Parcel Numbers, Corresponding Map Codes, Zoning and Acreage**, the proposed solar facility consists of 75 parcels. The proposed project could be built as a single 2,117-acre, approximately 375-MW facility or, alternatively, could be developed as three independent approximately 125-MW facilities on the Chaparral Site, Rabbitbrush Site, and the Tumbleweed Site, depending upon market conditions. The five potential interconnection options for the project are described above in **Table 1, Potential Interconnection Options**.

Based on current technology, the proposed project would consist of approximately 937,500 modules arranged in a grid-pattern over the proposed project (approximately 312,500 modules at each facility), however, the number of modules installed will account for future technological improvements. Per Option 1, power generated by the proposed project would be transferred via proposed collection lines, and then via an existing 230kV gen-tie line to the SCE Whirlwind Substation. The route for the proposed collection lines would traverse public access easements and County roads, and as such will require Franchise Agreement(s) with the County of Kern.



In addition to Option 1, there are four other potential interconnection options, as described above in **Table 1, Potential Interconnection Options**.

The proposed project would utilize high-efficiency commercially available solar PV modules that are Underwriters Laboratory (UL) listed or approved by another nationally recognized testing laboratory. Materials commonly used for solar PV modules include monocrystalline silicon, polycrystalline silicon, amorphous silicon, cadmium telluride (CdTe), and copper indium selenide/sulfide. The Applicants are considering using First Solar's proprietary thin film solar PV modules. The principal materials incorporated into the PV modules include glass, steel, and various semiconductor metals, including CdTe.

The proposed project would consist of solar arrays mounted either on fixed-tilt systems, horizontal tracker systems, or a combination thereof, and be mounted to vertical posts. The proposed facility is intended to operate year-round and would generate electricity during daylight hours when electricity demand is at its peak.

The power generated by the proposed project would be sold to California investor-owned utilities, or other power off taker(s) in the furtherance of the goals of the California Renewable Energy Portfolio Standard and other similar renewable programs in the state. The project proponents may eventually choose to decommission and remove all or none of the systems from the proposed project sites. If any facility (Chaparral, Rabbitbrush, Tumbleweed) is decommissioned, it would be converted to another use consistent with the applicable land use regulations in effect at that time.

The combined project facilities would include the following components:

- Installation of a total of approximately 375 MW of solar PV modules, mounted either on fixed-tilt systems, horizontal tracker systems, or a combination thereof. The mounting system for the modules will be supported by steel posts driven into the ground;
- Diesel, propane, or battery powered backup generators as required by applicable County or local codes for emergency backup power during project operations for stowing the trackers, or to maintain critical electronic equipment that is used for operation of the plant.
- Underground and above ground medium voltage collections systems, both on-site and off-site;
- Medium voltage inverters and step-up transformers;
- Installation of one or more additional transformers and associated equipment at two existing off-site solar project substations, i.e., the North Rosamond Solar Project Substation and Willow Springs Solar Project Substation (per Interconnection Option 1);
- SCE and/or LADWP improvements made at SCE Whirlwind substation and/or the proposed LADWP Rosamond Switching Station for the solar facilities to interconnect to the relevant substation or switching station.
- On-site substations (on the Chaparral and Tumbleweed Facility Sites) consisting of transformers and other equipment;
- On-site access roads;
- Perimeter security fencing which would be six feet high and topped with barbed wire, for a total height of seven feet;
- Concrete pads sized and installed to accommodate the associated equipment (inverters, switchgear, transformers, etc.);



- Meteorological data collection systems;
- Up to three unmanned Operations and Maintenance (O&M) buildings;
- Up to three 5-acre energy storage systems and associated appurtenances;
- Telecommunication equipment including underground and overhead telephone, fiber optics and wireless communications infrastructure such as cell, satellite, or microwave towers (for which CUP applications have been submitted (CUP 34, Map 232; CUP 36, Map 232; CUP 38, Map 232). This equipment will be both on-site and off-site. Regarding off-site telecommunication infrastructure, the project proponent expects to share existing wired or wireless telecommunications facilities with the North Rosamond Solar Project and the Willow Springs Solar Project from a local service provider; in the event that these facilities are not sufficiently available in the project vicinity, the project proponent may install hard-wired (land-line) systems, underground or on overhead lines; and
- Proposed and/or existing water well(s) on each individual facility site and/or well(s) shared by one or more of the three facilities.
- Pipeline(s), should water to the project site be supplied from the Willow Springs Solar Project. Such pipeline(s) may be used during the construction, operational and decommissioning phases of the proposed project.
- The following stormwater and water storage-related components (the location and number of which will be determined during detailed design engineering in accordance with applicable building codes):
 - Retention pond(s). Such retention pond(s) would be unlined. The only water entering retention pond(s) would be stormwater. Other than evaporation, water will only exit the retention pond(s) by seeping into the ground. Retention pond(s) may contain stormwater throughout the year.
 - Detention pond(s). The only difference between detention pond(s) and retention pond(s) is the amount of time which stormwater would remain contained (i.e., retention pond(s) may contain stormwater throughout the year, while detention pond(s) would only hold water for a short period of time before it seeps into the ground).
 - Drainage channel(s). These channel(s) will convey stormwater to the aforementioned on-site water feature(s) (i.e., retention pond(s) and/or detention pond(s)).
 - Temporary lined basin(s). These basin(s) would only be present during the construction phase of the proposed project. These basin(s) will be backfilled at the conclusion of the construction phase of the proposed project. Water in these basin(s) will come from well(s) and will be conveyed via pipeline. Other than evaporation, water exiting these basin(s) will (after potentially being piped to tank(s) on the project site) be loaded onto trucks and delivered as necessary on the project site (i.e., for site preparation, dust control).

Solar PV Panels

Solar energy would be captured by PV panels. Based on current technology, it is estimated that the proposed project would include approximately 937,500 modules.

- The Chaparral Facility would have an estimated 312,500 modules;
- Rabbitbrush Facility would have an estimated 312,500 modules;
- Tumbleweed Facility would have an estimated 312,500 modules;



However, the number of modules installed will account for future technological improvements.

Solar Trackers

The PV module rows would be oriented north-to-south if single-axis trackers are used. A solar tracking mechanism is used to maximize the solar energy conversion efficiency by keeping the modules perpendicular to the sun's energy rays throughout the day. This completed assembly of PV modules mounted on a framework structure is called a "tracker" because it tracks the sun from east to west. If used, single-axis trackers would increase the efficiency of energy production from the arrays relative to a fixed tilt system. The exact tracker manufacturer and model would be determined in the final design. All trackers are intended to function identically in terms of following the motion of the sun.

Module layout and spacing is optimized to balance energy production versus peak capacity and would depend on the sun angles and shading caused by the horizon surrounding the project. The spacing between the rows of trackers is dependent on site-specific features and would be identified in the final design. The final configuration would allow for sufficient clearance for maintenance vehicles and panel access. The maximum height of the tracker solar panels would be up to 13-feet above grade.

Fixed Tilt Racking System

If the fixed tilt racking system is used, fixed tilt rows will be arranged in east-west rows. The solar panels would be in a fixed tilt position that allows for the most sunlight specific to the geography of the project. The maximum height of the fixed tilt row solar panels would be up to 13-feet above grade.

Collection, Inverter and Transformer Systems

Each facility will have a collection system connecting PV modules to the substation which includes a combination of underground, aboveground cable trays and overhead (poles or H-Frame structures) DC and AC electrical and communication cables. DC electrical collection lines would connect the PV modules to the inverter. Inverters will convert the DC power into AC power. AC electrical lines will connect inverters to transformers. Transformers will increase the AC power to medium voltage (MV). MV AC electrical lines will connect MV transformers to the high voltage (HV) transformer(s) in the substation. PV combining switchgear (PVCS), Sectionalizing Cabinets (SC) or other electrical combiner boxes may be installed to combine electrical lines on the collection system.

The overhead collection system may contain single or multiple three phase electrical circuits and communication lines on the same structures. Overhead collection systems typically consist of wood or steel poles on monopoles or H-Frame structures. The collection system structures are proposed to have a maximum height of 75 feet, but may vary based on voltage, minimum height to avoid shading over modules, ground elevation, crossing of existing or proposed facilities, National Electric Safety code and right-of-way requirements.

Energy Storage System

The proposed project may have up to three Energy Storage Systems (ESS) (one on each facility site) encompassing approximately 5 acres per facility. The Chaparral Solar ESS has two potential locations which are dependent on which Interconnection option (Option 1 or Option 2 [i.e., any of the four options, other than Option 1, as shown in **Table 1, Potential Interconnection Options**]) is selected. Preliminary ESS locations and areas are shown on **Figure 14, Chaparral Facility Layout**, **Figure 16, Rabbitbrush Facility Layout**, and **Figure 18, Tumbleweed Facility Layout**. If the Chaparral Solar ESS Option 1 site area is ultimately developed with an ESS, the ESS Option 2 site area may be developed with solar modules or other project infrastructure or remain undeveloped. If the Chaparral Solar ESS Option 2 site area is ultimately developed with an ESS, the ESS Option 1 site area may be developed with solar modules or other project infrastructure or remain undeveloped.



Each ESS would consist of self-contained battery storage modules placed in racks, converters, switchboards, inverters, transformers, controls, and integrated heating, ventilation, and air conditioning (HVAC) units, all enclosed in one or more buildings or in prefabricated metal containers.

If the ESS uses prefabricated metal containers, each container will be a 40ft long by 8ft wide battery container, with side-doors accessibility to the battery racks that are installed inside. Adjacent to one or two DC battery containers will be one PCS (power conversion station) container (each PCS container will be 20ft long by 8ft wide) that will hold the inverter and Medium voltage transformer. The PCS is where the inverter and associated medium voltage step up transformer is located. The containers will be shipped and placed on a concrete foundation at the ESS. Approximately 100 DC battery containers and approximately 50 PCS containers will be installed.

The battery storage modules would use proven storage technologies such as Lithium Ion, Sodium-Sulphur, Vanadium-Redox-Flow, Zinc-based, or Iron-based batteries. More containers may be required due to the lower energy density of some of the technologies.

All prefabricated metal containers and building(s) installed/constructed on the project sites would have appropriate fire suppression systems built to applicable state and local code requirements. The final design would include appropriate containment features to prevent the escape of liquids or spills from the ESS site.

Generation-Tie Line and Interconnection to the Statewide Grid

Under Interconnection Option 1 (SCE Interconnection), the project will interconnect to the SCE Whirlwind Substation, as shown on **Figure 11, Project Boundary/SCE Interconnection (Option 1)**. The project will share off-site substations and gen-tie lines associated with the previously permitted Willow Springs Solar and North Rosamond Solar Projects as shown on **Figure 15, Chaparral Solar Site – Willow Springs Substation Shared Facilities**, **Figure 17, Rabbitbrush Solar Site – Rosamond Substation Shared Facilities**, and **Figure 19, Tumble weed Solar Site – Willow Springs Substation Shared Facilities**. Project interconnection will require SCE to install new interconnection-related components at the Whirlwind Substation such as additional control equipment. As proposed, the aforementioned components would occupy a maximum area of 100 square feet and will be attached to existing racks (i.e., not ground-mounted). Approval of the SCE Interconnection Facilities is within the sole discretionary permitting jurisdiction of the CPUC. However, because CEQA requires analysis of the environmental impacts of the full project, the project description includes the SCE Interconnection Facilities related to the proposed project for this purpose.

Under the four Interconnection Routes (LADWP Interconnection) labeled as Option 2 (as shown in Table 1, *Potential Interconnection Options*) the project will interconnect to the existing LADWP Barren Ridge – Rinaldi transmission line via the proposed LADWP Rosamond Switching Station being developed and constructed by LADWP and permitted by the California Public Utilities Commission independently of the proposed project. The aforementioned switching station is planned to be located south of Rosamond Boulevard, as shown on **Figure 12, Project Boundary/LADWP Interconnection (Option 2a)**, and **Figure 13, Project Boundary/LADWP Interconnection (Option 2b)**. Project Interconnection will require LADWP to install new interconnection-related components at the proposed LADWP Rosamond Switching Station including a 230 kV circuit breaker and two 230 kV disconnect switches, occupying an area of approximately 625 square feet (25' x 25'). Approval of the LADWP Interconnection Facilities is within the sole discretionary permitting jurisdiction of the CPUC. However, because CEQA requires analysis of the environmental impacts of the full project, the project description includes the LADWP Interconnection Facilities related to the proposed project for this purpose.



Restroom Facilities

As proposed, the proposed project would include the following restroom facilities:

- Restroom facilities inside of commercial coaches (served by water line and septic system).
- Restroom facilities inside of O&M buildings (served by water supply line and septic system).
- Portable toilets (not served by water supply line, not served by septic system). These portable toilets would be serviced by truck, and any waste generated would be disposed of at an approved off-site disposal facility.
- Portable hand washing facilities (not served by water supply line, not served by septic system). These portable hand washing facilities would be serviced by truck, and any wastewater generated would be disposed of at an approved off-site disposal facility.

Operation and Maintenance Facilities

Each facility would have a single O&M building of approximately 500 square feet, a 1,500 square foot graveled area for employee parking, an aboveground water storage tank(s), water lines, a septic system, and other associated facilities. Storage enclosures may be installed on concrete pads.

Service power will be provided by local provider (SCE), and backup generators (diesel, propane or battery powered) may be installed for operations.

On-site Meteorological Stations and Meteorological Towers

The proposed project will have approximately 8-foot-high meteorological stations within the solar field on pole or post. A minimum of six meteorological stations, two per facility are expected. The total quantity of meteorological stations will be dependent on customer and off-taker requirements. A meteorological station is a device that collects data related to weather and environment using many different sensors. The sensors may include a thermometer to take temperature readings, a barometer to measure pressure in the atmosphere, as well as other sensors to measure rain, wind and humidity.

Meteorological towers will be installed around the perimeter of the solar field (In addition to meteorological stations), if tracker technology is utilized. If tracker technology is not utilized, meteorological towers will not be installed. Meteorological towers will be 20-foot tall steel lattice or monopole towers mounted on concrete foundations. Up to 20 meteorological towers may be installed on the project site. A meteorological tower is a free-standing tower which carries measuring instruments with meteorological instruments such as thermometers and instruments to measure wind speed.

The preliminary locations for the meteorological towers are shown on **Figure 14, Chaparral Facility Layout**, **Figure 16, Rabbitbrush Facility Layout**, and **Figure 18, Tumbleweed Facility Layout**.

Site Access and Internal Circulation

The proposed project will have private driveway access off of County roads, private perimeter access roads, and interior access ways for construction and operation. Perimeter access roads and interior access ways will be composed of native compacted earth. All driveway approaches to/from the public right of way will be constructed in accordance with Kern County Development Standards. The project would be primarily accessed from State Route 14 via Rosamond Boulevard, Gaskell Road and West Avenue A or from State Route 138 via 170 St West. Road improvements may be required as part of the project.

Chaparral Solar may have driveways from Rosamond Boulevard, 100th St West and 110th St West. **Figure 14, Chaparral Facility Layout**, shows preliminary driveways and access roads for the facility. Rabbitbrush Solar may have driveways from 130th Street West, 120th St West and Rosamond Ave. **Figure 16, Rabbitbrush Facility Layout**, shows preliminary driveways and access roads for the facility. Tumbleweed Solar may have driveways from Gaskell Road, 100th Street West, 110th Street West, and



West Avenue A. **Figure 18, *Tumbleweed Facility Layout***, shows preliminary driveways and access roads for the facility. Preliminary driveway locations are shown on each facility layout, but may change during final design based on engineering considerations.

Site Security

Security fencing would be installed around each facility perimeter (non-contiguous portions will be fenced separately), and additional fencing will be installed around each substation, ESS, and other areas requiring controlled access, in order to restrict public access during construction and operations. Security fencing would be six feet tall and topped with three strands of barbed wire for a total height of seven feet. The fence posts may be set in concrete. Additional security may be provided through the use of closed-circuit video surveillance cameras and intrusion systems, electronic security systems or other available technology. On-site personnel may be part of 24-hour site security.

Night lighting will be installed for security and maintenance needs at the main access entrances, O&M buildings, substations, and major equipment enclosures. The O&M buildings and substation lighting will be controlled by motion sensors, by a control switch accessible within the site control center or as required by code. A site control center is a mechanical and electrical equipment room, a separate structure with air conditioning, lighting, receptacles and alarm monitoring, built to house substation electrical controls and the auxiliary power for control systems to operate a substation. A site control center would be located adjacent to the substation for each facility (however, in the event a facility does not have an on-site substation, it would not have a site control center). The estimated size of each site control center is approximately 700 square feet. Night lighting would be directed inwards, shielded and/or have reduced lumens. Maintenance of the plant may be necessary during nighttime hours. In this event, portable, directional lighting would be utilized for the work areas. All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties, in conformance with the Kern County Zoning Ordinance (Chapter 19.81) – Outdoor Lighting – Dark Skies requirements.

Construction Activities

Construction Schedule

Construction of the project is anticipated to take 12 to 36 months. Each facility will have different completion dates depending upon power procurement contracts.

The on-site construction workforce will consist of laborers, craftsmen, supervisory personnel, support personnel, and construction management personnel. The on-site construction workforce for the project is expected to peak at 1,455 individuals, however, the average daily workforce is expected to be 688 individuals on-site during construction.

Construction activities would be conducted consistent with Kern County Code of Ordinances, Title 8, Chapter 8.36.020 (Noise Control) regarding hours of construction or as approved by Kern County. Certain activities such as high-voltage system modifications may need to occur at nighttime and will be performed with shielded, temporary lighting.

Site Grading and Earthwork

Construction of the project will require the following temporary facilities:

- One or more construction staging areas on the project site consisting of commercial coaches for offices and first aid station, parking, portable toilets, septic system(s), temporary power service from the electrical grid, temporary generators, truck loading and unloading area, material staging and assembly area, material storage area, and receptacles for trash;
- A construction staging area to be used for substation modifications on North Rosamond Solar and/or Willow Springs Solar Project property;



- Construction workforce parking area with adequate parking spaces for the workforce necessary for construction of the project;
- Off-site stringing and pulling sites (i.e., installation of electrical/communications wire and poles or H-Frame structures) and temporary construction areas at each new structure for the Tumbleweed Solar, Chaparral Solar, and Rabbitbrush Solar collection lines;
- Stringing and pulling sites and temporary construction areas at each new structure for the new Chaparral Solar 230 kV gen-tie line (which would transmit electricity between the on-site Chaparral Substation and the proposed LADWP Rosamond Switching Station); and
- Temporary lined basin(s), as defined above.

Site Preparation

Sediment and erosion controls will be installed in accordance with all applicable regulations.

Materials will be recycled where feasible, with remaining disposal in landfills in compliance with all applicable regulations. There are five (5) existing residences located within the proposed project boundaries, as referenced below. All existing residences and residential accessory structures are proposed to be demolished and removed:

- Residence #1: located on APN 358-160-09, Rabbitbrush facility, uninhabited
- Residence #2: located on APN 358-152-27, Chaparral facility, inhabited
- Residence #3: located on APN 359-032-34, Tumbleweed facility, inhabited
- Residence #4: located on APN 359-032-36, Tumbleweed facility, inhabited
- Residence #5: located on APN 359-032-37, Tumbleweed facility, inhabited

Within the solar field areas, a combination of mowing, “disk-and-roll” techniques and, where necessary, conventional grading may be used to prepare the site for array installation. In areas where mowing will not yield a satisfactory work surface, disk-and-roll techniques may be utilized. Disk-and-roll site preparation uses tractors pulling disking equipment to till under vegetation. Grading will be minimized to the extent practical. Conventional grading techniques may be used for access roads, parking areas, substations, energy storage systems, building or equipment foundations, detention pond(s), retention pond(s), and laydown areas.

Construction will begin with the installation of fencing around the perimeter of each individual facility site. The perimeter fence will also include signs providing directions to primary site access. Road corridors, buried electrical lines, PV array locations, and the locations of other facilities may be flagged and staked in order to guide construction activities.

Solar PV Generating Facility Installation

Each individual solar PV facility installation will include site preparation to accommodate the placement of PV arrays, concrete for foundations, the facility substation (if applicable), access roads, and drainage features.

The construction of the solar field will proceed in array blocks and will include the following:

- Installation of steel posts and mounting system;
- Installation of PV modules;
- Installation of overhead, aboveground, or underground collection system cable and associated equipment on concrete pads, vaults, posts or poles; and



- Concrete foundations for substation equipment, ESS, and O&M buildings. Final concrete specifications will be determined during detailed design engineering in accordance with applicable building codes. These concrete foundations may be precast or cast in place.

Substation Construction

Each new or existing substation will be separately fenced to provide required security around the high-voltage electrical equipment. The new substation area, for Interconnection Option 2, will be excavated, a copper grounding grid will be installed, and the foundations for transformers and metal structures will be installed. The area will first be backfilled, compacted, and leveled, followed by the application of an aggregate rock base. Next, equipment installation associated with the transformers, breakers, bus-work, and metal dead-end structures (i.e., structures where a line ends, which require a design capable of carrying heavier tension) will follow. The mineral oil-filled transformers may arrive pre-filled or may be filled on-site. There will be a site control center (SCC) equipment building(s), located in or next to the new and/or existing substations, which will house substation and plant control equipment, meters, backup generators (diesel, propane or battery powered), and other electrical equipment.

Table 4 outlines the necessary modifications required at the Willow Springs Solar Project Substation and North Rosamond Solar Project Substations for Interconnection Option 1.

TABLE 4 - WILLOW SPRINGS SOLAR AND NORTH ROSAMOND SOLAR SUBSTATIONS MODIFICATIONS

Facility	Willow Springs Solar Project Substation	North Rosamond Solar Project Substation
Chaparral Solar Facility	The fence line to be expanded and new equipment installed. Earthwork needed.	N/A
Tumbleweed Solar Facility	New equipment to be installed. No earthwork needed.	N/A
Rabbitbrush Solar Facility	N/A	New equipment to be installed. No earthwork needed.

Gen-Tie Line Construction

During construction of Chaparral Solar and Tumbleweed Solar, if interconnection Option 2 to connect to the LADWP line is utilized, a 230 kV gen-tie line will be installed (which would transmit electricity from the on-site Chaparral Substation to the proposed LADWP Rosamond Switching Station) with the location of each transmission pole surveyed and staked. Poles are estimated to be approximately 100 to 150 feet in height; the maximum proposed pole height is estimated to be 150 feet. Foundations for each transmission pole will be constructed, the transmission poles erected, and transmission pole arms and insulators installed. After transmission pole installation occurs, conductor stringing and terminations will be performed to ensure the new 230 kV gen-tie line is operating correctly. Primary overhead and redundant underground and/or overhead communication lines will also be installed.

Energy Storage System Construction

The project may have up to three on-site Energy Storage System (ESS) (one for each facility developed). Each ESS will be composed of battery storage modules placed in multiple prefabricated enclosures or in a building near the on-site substations. The area will be graded, compacted, and leveled, followed by the



application of an aggregate rock base. The ESS area will be separately fenced. If placed in prefabricated enclosures, the construction will include moving the ESS enclosures with a crane or forklift to the appropriate location. If a building is used it will be assembled on site. The final location of the ESS enclosures is dependent on final design and may require construction of a vault or other form of supporting foundation.

Construction of Operations and Maintenance (O&M) Area

The project may include up to three O&M areas, one for each facility. Each O&M area may include a one-story O&M building up to 500 square feet that will house administrative, operation, and maintenance equipment along with sanitary facilities (i.e., septic system). Concrete foundations will be poured to support the O&M building, and a 1,500 square foot area adjacent to the building will be surfaced with gravel for employee parking. Aboveground water storage tank(s), water lines to the facility water source, septic system and other associated facilities will be constructed in the O&M area. Storage enclosures may be installed on concrete pads. The design and construction of the O&M building(s) will comply with applicable County building standards.

Construction Water Use

Construction activities for the proposed project are anticipated to require approximately 900 acre-feet of water. During the construction phase, water for the three solar facilities will be supplied from one or more of the following options:

1. Potential and/or existing well(s) on each individual facility site and/or well(s) shared by one or more of the three facilities.
2. Existing well(s) on the Willow Springs Solar Project site. If water is supplied from the Willow Springs Project site, it will be piped via pipeline(s) or trucked.
3. A potential well drilled on the Willow Springs Solar Project site, APN 359-031-57.
4. Trucked Antelope Valley-East Kern Water Agency (AVEK) water collected at one of the nearby locations owned by AVEK.

There are 15 known existing water wells on the project site described as follows, however, the project proponent has not completed testing yet to know if the wells are viable for use in conjunction with the proposed project:

1. Water well 1, Rabbitbrush Facility Site, APN 358-152-54
2. Water well 2, Rabbitbrush Facility Site, APN 358-160-09
3. Water well 3, Rabbitbrush Facility Site, APN 358-010-04
4. Water well 4, Rabbitbrush Facility Site, APN 358-030-29
5. Water well 1, Chaparral Facility Site, APN 358-152-27
6. Water well 2, Chaparral Facility Site, APN 358-030-12
7. Water well 3, Chaparral Facility Site, APN 358-030-08
8. Water well 4, Chaparral Facility Site, APN 358-390-16
9. Water well 1, Tumbleweed Facility Site, APN 359-032-13
10. Water well 2, Tumbleweed Facility Site, APN 359-032-20
11. Water well 3, Tumbleweed Facility Site, APN 359-032-21
12. Water well 4, Tumbleweed Facility Site, APN 359-032-34
13. Water well 5, Tumbleweed Facility Site, APN 359-032-34
14. Water well 6, Tumbleweed Facility Site, APN 359-032-38
15. Water well 7, Tumbleweed Facility Site, APN 359-032-38



Project Operations and Maintenance

The operation and maintenance of the proposed project will require up to 30 full-time equivalent (FTE) personnel (or personnel hours totaling 30 FTE positions). Operations and maintenance staff will typically work during regular business hours Monday through Friday. During periods when non-routine maintenance or major repairs are in progress, the maintenance staff will typically work during nights when the project is not generating power to the grid. The project may utilize 24-hour security (any security personnel are included in the aforementioned 30 FTE positions figure).

Preventive maintenance kits and certain critical spare equipment will typically be stored on-site, while all other components will be readily available from a remote warehouse facility.

Operational Water Requirements

The project's operational water consumption is expected to be approximately 30 acre-feet per year to be used for toilets and hand washing facilities, fire protection, and potentially for PV solar panel washing. Water storage tank(s) may be installed at the O&M areas to store water. Additional potable water may be delivered for O&M staff consumption.

Operations water for the three solar facilities will be supplied from one or more of the following options:

1. Potential and/or existing well(s) on each individual facility site and/or well(s) shared by one or more of the three facilities.
2. Existing well(s) on the Willow Springs Solar Project site. If water is supplied from the Willow Springs Project site, it will be piped via pipeline(s) or trucked.
3. A potential well drilled on the Willow Springs Solar Project site, APN 359-031-57.
4. Trucked Antelope Valley-East Kern Water Agency (AVEK) water collected at one of the nearby locations owned by AVEK.

Project Decommissioning

Solar equipment typically has a lifespan of over 30 years. The project expects to sell the renewable energy produced by the project under the terms of a long-term Power Purchase Agreement (PPA) with a utility or other power off taker. Upon completion of the PPA term, the project operator may, at its discretion, choose to enter into a subsequent PPA or decommission and remove the system and its components. Upon decommissioning, the solar facility could be converted to other uses in accordance with applicable land use regulations in effect at that time. The options for water supply during decommissioning are the same as those listed above, under the Operational Water Requirements heading.

It is anticipated that, during project decommissioning, project structures that would not be needed for subsequent use would be removed from the project site. Above-ground equipment that may be removed would include module posts and support structures, on-site transmission poles that are not shared with third parties and the overhead collection system within the project site, inverters, transformers, electrical wiring, equipment on the inverter pads, and related equipment and concrete pads. The substations would be removed if owned by the project. However, if a public or private utility assumes ownership of the substations, the substations may remain on-site to be used as part of the utility service to supply other applications.

Equipment would be de-energized prior to removal, salvaged (where possible), and shipped off-site to be recycled or disposed of at an appropriately licensed disposal facility. Once the solar modules are removed, the racks would be disassembled, and the structures supporting the racks would be removed. Site infrastructure would be removed, including fences, and concrete pads that may support the inverters, transformers and related equipment. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried by standard construction equipment. The fencing



and gates would be removed, and all materials would be recycled to the extent practical. Project roads would be restored to their pre-construction condition unless they may be used for subsequent land use. The area would be thoroughly cleaned and all debris removed. Materials would be recycled to the extent feasible, with the remainder disposed of in landfills in compliance with all applicable laws.

1.4 Project Objectives

The project proponents have defined the following objectives for the project:

- Develop a solar PV power generating project that is of a sufficient size and configuration to deliver approximately 375 MWac of electricity in order to assist the State of California in achieving the Renewable Portfolio Standard obligations and Senate Bill 350 and California Global Warming Solutions Act (AB 32) greenhouse gas reduction goals by providing a significant new source of renewable energy;
- Produce and transmit electricity at a competitive cost;
- Locate generating facilities in a rural portion of southeastern Kern County which receives intense solar radiation and is in proximity to an available interconnection to the existing or permitted electrical transmission system;
- Minimize environmental impacts by:
 - Using existing electrical transmission facilities, rights-of-way, roads, and other existing infrastructure where practicable;
 - Minimizing water use; and
 - Reducing greenhouse gas emissions
- Use technology that is available, proven, efficient, easily maintained and environmentally sound;
- Assist the County in continuing the goal in the Energy Element of its General Plan to develop large scale solar energy development as a major energy source in the County; and
- Develop a commercially financeable renewable energy project.

1.5 Proposed Discretionary Actions/Required Approvals

To implement the proposed project, the following discretionary and ministerial permits/approvals may be required, including but not limited to the following permits and agency approvals:

Federal

- U.S. Fish and Wildlife Service (USFWS)
- United States Army Corps of Engineers Jurisdictional Delineation and, if necessary, Section 404 permit

State

- California Public Utilities Commission
- California Department of Fish and Wildlife (CDFW)
 - Section 1600 et seq. permits (Streambed Alteration Agreements)
 - Section 2081 Permit (state-listed endangered species)



- Lahontan Regional Water Quality Control Board (RWQCB)
 - Waste Discharge Requirements
 - Regional Water Quality Certification (401 Permit)
 - National Pollution Discharge Elimination System (NPDES) Construction General Permit if impacts to federal waters will occur
 - Regional Water Quality Certification (401 Permit), if a Section 404 permit is necessary
- California Department of Transportation (Caltrans)
 - Right-of-Way Encroachment Permit
 - Oversized Loads Permit

Other additional permits or approvals from responsible agencies may be required for the project

Local

County of Kern

- Certification of Final Environmental Impact Report
- Adoption of 15091 and 15093 Findings and Statement of Overriding Considerations
- Adoption of Mitigation Monitoring and Reporting Program
- Approval of Kern County Specific Plan Amendments (SPA 1, Map 231-18; SPA 2, Map 231-18; SPA 25, Map 232; SPA 26, Map 232; SPA 27, Map 232; SPA 28, Map 232; SPA 29, Map 232; SPA 30, Map 232)
- Approval of Kern County Zone Changes (ZCC 3, Map 231-18; ZCC 40, Map 232; ZCC 41, Map 232; ZCC 42, Map 232)
- Approval of Kern County Conditional Use Permits (CUP 1, Map 231-18; CUP 33, Map 232; CUP 34, Map 232; CUP 35, Map 232; CUP 36, Map 232; CUP 37, Map 232; CUP 38, Map 232)
- Approval of Nonsummary Vacations (Chaparral Site, Rabbitbrush Site, Tumbleweed Site)
- Approval of applicable Franchise Agreement(s).
- Approval of Grading Permits
- Approval of Building Permits
- Approval of Kern County Encroachment Permits
- Fire Safety Plan

Eastern Kern Air Pollution Control District (EKAPCD)

- Fugitive Dust Control Plan
- Any other permits as required

Other additional permits or approvals from responsible agencies may be required for the proposed project.



2.0 Kern County Environmental Checklist Form

2.1 Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Agriculture/Forestry | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Land Use/Planning | <input checked="" type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input checked="" type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION. (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENT IMPACT REPORT (EIR) is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Printed Name

Title



3.0 Evaluation of Environmental Impacts

- (1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- (2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- (3) Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.
- (4) Negative Declaration: “Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The Lead Agency must describe the mitigation measure and briefly explain how they reduce the effect to a less than significant level.
- (5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration, Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - (a) Earlier Analysis Used. Identify and state where they are available for review.
 - (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - (c) Mitigation Measures. For effects that are “Less Than Significant With Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- (6) Lead Agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- (7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- (8) The adopted guidelines state “This is only a suggested form, and lead agencies are free to use different formats; however, Lead Agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected. “Kern County has adopted this format and included all questions from Appendix G.
- (9) The explanation of each issue should identify:
 - (a) The significance criteria or threshold, if any, used to evaluate each question; andThe mitigation measure identified, if any, to reduce the impact to less than significance.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RESPONSES:

- (a) The project is located in a sparsely developed, rural area of Kern County. Land uses in the region include a mix of undeveloped land, solar and wind energy production facilities, transmission facilities, and rural residential development. The project site is not located within an area designated for or identified as having a scenic vista or scenic views. However, because the project would substantially change views from public roads, impacts to scenic vistas may occur and will be further analyzed in the EIR.
- (b) According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System, the closest eligible scenic highway is the portion of State Route (SR) 14 north of SR 58, which is approximately 13 miles northeast of the project. Because of this distance, the project would not be visible from SR 14. Therefore, there are no anticipated project impacts to scenic resources within a state scenic highway.
- (c) The aesthetic features of the existing visual environment within the project boundary are relatively uniform, with natural desert vegetation and active and fallowed agricultural land. Outside of the project boundaries is a mix of undeveloped land, agricultural land, rural residential development, as well as existing solar and wind electrical generation facilities and transmission infrastructure. Desert vegetation and agricultural fields dominate the project site and the region. The project will construct arrays, meteorological towers, communications towers and collection and transmission infrastructure, similar in visual nature to the nearby solar generation facilities. Due to the relatively flat topography of the project and low height of the photovoltaic (PV) solar arrays, visual impacts would most likely be limited to the



small number of persons traveling along nearby roads such as Rosamond Boulevard. Additionally, the project will utilize shared transmission infrastructure from nearby solar projects. Views of the project would also be visible from the scattered residences in the project vicinity. Placement of PV solar modules and associated structures on the project site would alter the character of the area. Residents and travelers on adjacent roads would observe alterations to the existing landscape. Changes to the visual quality and character of the project site may be significant, and impacts will be further analyzed in the EIR.

- (d) The project is located in area that contains scattered rural residential development as well as existing permitted solar and wind electrical generation facilities and transmission infrastructure. The PV modules are designed to absorb sunlight to maximize electrical output; therefore, they would not create significant reflective surfaces or the potential for glint/glare during the day. All lighting at the proposed solar facilities would be designed to meet Kern County Zoning Ordinance Chapter 19.81, Outdoor Lighting - Dark Skies, requirements. However, further analysis of the specific lighting and effects of nighttime light and glare from the project will be provided in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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II. AGRICULTURE AND FOREST RESOURCES.

Would the project:

- | | | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104 [g]), | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15206(b)(3) Public Resources Code? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

RESPONSES:

- (a) According to the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) 2016 Important Farmland map, the project is designated “Grazing Land”, “Nonagricultural and Natural Vegetation”, “Prime Farmland”, “Farmland of Statewide Importance”, “Vacant or Disturbed Land,” and “Semi-Agricultural and Rural Commercial Land” (DOC 2016). Parcels within the project boundary or in the vicinity are not subject to a Williamson Act Land Use contract. A portion of the Tumbleweed site is currently under cultivation (i.e., orchards). The Chaparral Facility and Rabbitbrush Facility sites do not contain



Important Farmland, which is defined as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The 2016 FMMP data indicate that portions of the Tumbleweed Solar Facility are designated as Prime Farmland and Farmland of Statewide Importance. Prime Farmland is defined in part as having the best combination of physical and chemical features able to sustain long-term agricultural production. Farmland of Statewide Importance is defined as being similar to Prime Farmland but with minor shortcomings such as greater slopes or less ability to store soil moisture. The project would convert farmland to non-agricultural uses, and this issue will be further analyzed in the EIR.

- (b) The project site is located within Kern County Agricultural Preserve No. 24. According to available data, none of the parcels included as part of the proposed project or any property in the vicinity of the project are subject to a Williamson Act Land Use contract. A portion of the project site is in the A (Exclusive Agriculture) Zone District; as proposed, all other portions of the project would be rezoned to the A Zone District. The proposed project would not conflict with a Williamson Act contract. Impacts on agricultural zoning are considered less than significant, however this issue will be discussed further in the EIR.
- (c)-(d) The project site predominately contains open desert and active farmland. The project is not situated on forest land or timberland that are currently under production. There is no land within the project site or adjacent to the project site that is zoned as forest land, timberland, or lands zoned for timberland production. Therefore, there would not be any anticipated impacts related to conflicts with current zoning, the rezoning of forest land, timberland, or timberland zoned for timberland production.
- (e) As noted in response (a) above, the project site includes lands currently used in agricultural production. As discussed in response (c)-(d), above, the project site does not contain any forest land, nor is any forest land or timberland located within the surrounding area. The project would convert farmland to non-agricultural uses, and this issue will be further analyzed in the EIR.
- (f) As noted in response (b), above, the lands within the project are not under a Williamson Act Contract and implementation of the project would not result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Public Resources Code Section 15206(b)(3)). Therefore, no impacts are anticipated.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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III. AIR QUALITY. The significance criteria established by the applicable Air pollution control district shall be relied upon to make the following determinations. Would the project:

- | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard? Specifically, would implementation of the project (in a specific location) exceed any of the following adopted thresholds: | | | | |

i. San Joaquin Valley Unified Air Pollution Control District:

Operational and Area Sources

Reactive Organic Gases (ROG) 10 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Oxides of Nitrogen (NO _x) 10 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Particulate Matter (PM ₁₀) 15 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Stationary Sources as determined by District Rules

Severe Nonattainment 25 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Extreme Nonattainment 10 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
III. AIR QUALITY. (Continued)				
ii. Eastern Kern Air Pollution Control District.				
<u>Operational and Area Sources</u>				
Reactive Organic Gases (ROG) 25 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oxides of nitrogen (NO _x) 25 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Particulate Matter (PM ₁₀) 15 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Stationary Sources - determined by District Rules</u>				
25 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES:

- (a) The project is located entirely within the jurisdiction of the Eastern Kern Air Pollution Control District (EKAPCD), in the Mojave Desert Air Basin (MDAB). EKAPCD is designated as a nonattainment area for both the state and federal ozone standards and the state particulate matter (PM₁₀) standard. project construction would generate emissions of reactive organic gases (ROG) and oxides of nitrogen (NO_x), both of which are known as ozone precursors, and PM₁₀ that could result in significant impacts to air quality in the area. EKAPCD's most recently adopted air quality management plan as its Ozone Air Quality Attainment Plan (AQAP). As the project would generate emissions of ozone precursors (along with PM₁₀) during construction, the project could potentially conflict with EKAPCD's Ozone AQAP. Thus, further analysis of the project's air quality impacts is warranted to determine whether the project would conflict with or obstruct implementation of EKAPCD's applicable air quality plan for attainment and, if so, to determine the reasonable and feasible mitigation measures that could be imposed. These issues will be evaluated in the EIR.
- (b) The project is not located within the San Joaquin Valley Unified Air Pollution Control District and, therefore, its adopted thresholds do not apply. However, as noted in response (a) above, the project is located within the EKAPCD, which is designated as a nonattainment area for the state and federal ozone standards and the state PM₁₀ standard. As such, the emissions of ozone precursors (ROG and NO_x) and PM₁₀ during construction and operation of the project could result in a cumulatively considerable net increase of these



criteria pollutants in the MDAB. Thus, the project's contribution to cumulative air quality impacts in the MDAB could be potentially significant. The project's contribution of construction and operational emissions to the MDAB will be analyzed in the EIR.

- (c) The land uses surrounding the project consist primarily of undeveloped land, scattered residential and agricultural uses, and renewable energy (wind and solar) facilities. There are multiple residences in the vicinity of the project. The project's construction-related activities would result in diesel exhaust emissions and dust that could adversely affect air quality for the nearest sensitive receptors.

Exposure to Valley Fever from fugitive dust generated during construction is a potentially significant impact. There is the potential that cocci spores could be stirred up during excavation, grading, and earth-moving activities, exposing construction workers and nearby sensitive receptors to these spores and thereby to the possibility of contracting Valley Fever. Thus, impact to sensitive receptors via pollutant concentrations is potentially significant and will be evaluated further in the EIR.

- (d) The project would not have any stationary sources or equipment located on-site that would generate objectionable odors. During construction activities, only short-term, temporary odors from vehicle exhaust and construction equipment engines would occur. However, these odors would not affect a substantial number of people because the site is located in sparsely inhabited areas, and any odors would be temporary and would be dispersed rapidly. Therefore, project impacts are expected to be less than significant, and this will be further evaluated in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES.				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



RESPONSES:

- (a) The project is located in the eastern high desert region of unincorporated Kern County in the Mojave Desert, approximately 14 miles southwest of the unincorporated community of Mojave and approximately 5.5 miles west of the unincorporated community of Rosamond. The dominant native habitat types present within the project area are creosote bush scrub, white bursage scrub, and alkaline desert scrub. There is a potential for special-status plants and wildlife species to be present in the project vicinity. Therefore, impacts to special-status species and their habitats are potentially significant.

Field surveys for special-status plant and animal species, riparian and sensitive natural communities, and species listed as either threatened or endangered by either the state or federal government will be completed and included in the EIR. The project's potential to have a substantial adverse effect, either directly or through habitat modifications, on any candidate, sensitive, or special-status species in local or regional plans or regulations by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS) will be evaluated in the EIR.

- (b) The project is undeveloped and comprised of desert scrub vegetation communities and active and fallow agricultural land. Field surveys for sensitive natural communities including a biological assessment and jurisdictional delineation will be completed for the project, and the results included in the EIR. These studies will be used to evaluate potential project-related impacts to sensitive natural communities in the EIR.

The USFWS does not identify any critical habitats on or near the project (USFWS 2016). The nearest critical habitat is located approximately 14 miles west of the site, in the Tehachapi Mountains, for California condor (*Gymnogyps californianus*).

A biological assessment, protocol surveys, soils characterization, and hydrologic analysis will be prepared for the project. These studies will be used to evaluate potential project-related impacts to sensitive natural communities in the EIR.

- (c) The Mojave Desert Basin is a part of the Great Basin, an area characterized by long, narrow mountain ranges and deep valleys located between the Rocky Mountains and the Sierra Nevada. The Great Basin is considered an area of closed drainage; its waters and streams are confined to closed basins (USGS 1998). The project site is highly unlikely to contain any federally protected wetlands, marshes or vernal pools, or other protected waterways, because local waters do not drain to a traditionally navigable water of the United States; therefore, project implementation is not likely to result in impacts related to wetlands. However, the project does have several drainage routes that may be considered jurisdictional waters of the State. Further analysis to identify potentially jurisdictional waters and any impacts to such waters will be included in the EIR.
- (d) While the project lies outside of known habitat linkages in the region, the site may be used for more local wildlife movement, and likely provides stopover and wintering habitat for birds. Project construction and operation could also remove both foraging and nesting/denning habitat for wildlife species. No known established wildlife corridors or native wildlife nursery sites are within the site boundaries. However, impacts to wildlife habitat and movement are potentially significant and will be evaluated in the EIR.



- (e) The CDFW considers Joshua tree woodland to be a sensitive natural plant community and compliance with the California Desert Native Plants Act of the California Food and Agricultural Code, Division 23, is required for the removal of Joshua trees. Scattered, widely spaced Joshua trees occur throughout portions of the Rabbitbrush and Chaparral Solar Facilities; however, they do not occur at a density high enough to consider them a distinct woodland community. Potential impacts to Joshua trees and other similar resources will be analyzed in the EIR.

- (f) The proposed project is located within the U.S. Bureau of Land Management's (BLM) West Mojave Plan (WMP) planning area. However, the WMP applies only to federal public lands managed by the BLM and is not an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). The site is also located within a BLM-designated Development Focus Area pursuant to BLM's Desert Renewable Energy Conservation Plan (DRECP). Development Focus Areas have been identified because of their potential for energy generation and minimal conflict with sensitive biological resources, and are therefore more likely to be appropriate for renewable energy development. However, at this time the DRECP applies only to federal public lands managed by the BLM and is not an adopted HCP or NCCP. There are no anticipated impacts to these designated areas or plans because the project would not conflict with the provisions of an adopted HCP or NCCP.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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V. CULTURAL RESOURCES. Would the project:

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|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

RESPONSES:

- (a)-(b) The project site consists of undeveloped desert land and cultivated and fallowed agricultural land. Development of the project would require some ground disturbance for installation of the solar arrays and placement of aboveground and underground electrical and communication lines, which could impact historical or archaeological resources. A cultural resources survey will be conducted for the project. Therefore, further evaluation in the EIR is warranted to evaluate potentially significant impacts to historical, and archaeological resources, and to formulate avoidance or mitigation measures, if applicable.
- (c) There is no evidence to indicate the project is located within an area likely to contain human remains and discovery of human remains during earthmoving activities is not anticipated. However, the potential for human remains to be encountered will be further analyzed in the EIR.



Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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VI.	ENERGY. Would the project:				
	a) Result in potentially significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources, during project construction or operation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES:

- (a) Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the sites where energy supply cannot be met via a hookup to the existing electricity grid.

Following implementation of the proposed project, energy would switch from consumption to production. Energy use associated with operation of the proposed project would be typical of a solar facility. Operation and maintenance facilities associated with the project would require electricity for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, could involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with employee vehicle trips generated by the proposed project. Further analysis in the EIR is warranted.

- (b) Due to the increased on-site consumption of energy during construction, the project has the potential to conflict with or obstruct a state or local plan for energy efficiency. Operation of the project would lead to an overall increase in the County's Renewable Energy Portfolio, and would align with the stated General Plan policy to encourage the development of renewable energy within Kern County. Impacts are considered to be less than significant; however, further analysis is warranted, and this topic will be discussed and analyzed in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (19914), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



RESPONSES:

- (a) (i) The project site is not located within any earthquake fault zone or seismic hazard zone as established pursuant to the Alquist-Priolo Earthquake Fault Zoning Act.

In addition, although the project does not include any habitable structures, construction of the project would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08). Kern County has adopted the California Building Code (CBC) 2016 Edition (CCR Title 24) effective January 1, 2017, which imposes substantially the same requirements as the International Building Code (IBC), 2015 Edition, with some modifications and amendments. Adherence to all applicable regulations would mitigate any potential impacts associated with the project. Impacts would be less than significant; however, further analysis in the EIR is warranted.

- (ii) Due to the location of active faults in the general region, strong seismic ground shaking could occur at the project site, resulting in damage to structures that are not properly designed to withstand strong ground shaking. The project would include the construction of solar PV panel arrays, transmission lines, and other associated infrastructure. As described above, the project also would include the construction of up to three O&M buildings. Should strong seismic ground shaking occur at the project, damage to the PV modules and other ancillary facilities (e.g., O&M buildings) could result. However, construction of the project would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08), and IBC and CBC earthquake construction standards, including those relating to soil characteristics.

Adherence to all applicable regulations would mitigate any potential impacts associated with seismic ground shaking at the project site. Although the project site would potentially be subject to moderate to strong ground shaking from regional earthquakes, the project would not expose substantial numbers of people to adverse impacts as a result of code compliance. Adherence to all applicable regulations would reduce potential impacts associated with seismic ground shaking at the project site. Although potential impacts associated for this issue area are anticipated to be less than significant, further analysis in the EIR is nevertheless warranted.

- (iii) Seismically induced liquefaction occurs when loose, water-saturated sediments of relatively low density are subjected to cyclic shaking that causes soils to lose strength or stiffness because of increased pore water pressure. Liquefaction generally occurs when the depth to groundwater is less than 50 feet. Based on review of available groundwater data in the site vicinity, groundwater in the area is reported to be more than 50 feet below ground surface. Thus, the potential for liquefaction at the surface is low. Furthermore, the project is not located within a current, mapped California Liquefaction Hazard Zone. Structures constructed as part of the project would be required by state law to be constructed in accordance with all applicable IBC and CBC earthquake construction standards, including those relating to soil characteristics. Nonetheless, the potential for substantial adverse effects to the project due to seismic-related ground failure, including liquefaction, will be examined in the EIR.
- (iv) The project is located in a relatively flat-lying plain and does not contain any steep slopes; the likelihood of landslides is very low. Therefore, impacts related to landslides are not anticipated to occur or pose a hazard to the project or surrounding area. However, the potential for substantial adverse effects to the project due to landslides will be examined in the EIR.



- (b) The project would employ a combination of mowing, “disk-and-roll” techniques and, where necessary, conventional grading. Disk-and-roll site preparation uses tractors pulling disking equipment to till under vegetation. As a result, project construction would have the potential to result in erosion, sedimentation, and discharge of construction debris from the site. Vegetation clearing and grading activities, for example, could lead to exposed or stockpiled soils susceptible to peak stormwater runoff flows and wind forces. The compaction of soils by heavy equipment may minimally reduce the infiltration capacity of soils (exposed during construction) and increase runoff or erosion potential. An erosion and sediment control plan would be prepared that specifies best management practices (BMPs) to prevent construction pollutants, including eroded soils (such as topsoil), from moving off the site. Although impacts are anticipated to be less than significant with implementation of the project proponent’s approach to site preparation and the County and state requirements, impacts related to soil erosion or the loss of topsoil will be evaluated further in the EIR.
- (c) The project lies in a relatively flat-lying plain where landslides, lateral spreading, subsidence, liquefaction, and collapse are not expected to occur. Impacts related to geologic instability are not anticipated to occur or pose a hazard to the proposed project or surrounding area. However, this issue will be further analyzed in the EIR.

Based on the data available from the California Department of Water Resources, the groundwater level beneath the site is approximately 100 to 300 feet; therefore, liquefaction is unlikely because the ground water levels are relatively deep. Thus, liquefaction is not a potentially significant impact related to the project. Seismic settlement, lateral spreading, and collapse are not expected to result in significant impacts. Furthermore, the structures would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08), as well as all applicable IBC and CBC earthquake construction standards, including those relating to soil characteristics. Nevertheless, the potential for substantial adverse effects to the project due to geologic instability and liquefaction will be examined in the EIR.

- (d) Expansive soils are fine-grained soils (generally high-plasticity clays) that can undergo a significant increase in volume with an increase in water content and a significant decrease in volume with a decrease in water content. Changes in the water content of a highly expansive soil can result in severe distress to structures constructed on or against the soil. The expansion potential of on-site soils may be classified as very low to low, and special design is not necessary. Nevertheless, the project would be designed to comply with applicable building codes and structural improvement requirements to withstand the effects of expansive soils. The implementation of Kern County Building Code requirements, as applicable, would minimize the potential impact of expansive soils. The EIR will confirm the presence or absence of expansive soils within the project area.
- (e) The project includes construction of three O&M buildings, which would support an estimated 10 employees each for a total of 30 employees. The project will provide wastewater disposal facilities (i.e., septic systems) to accommodate use by these employees which, based on information of the surrounding soils and experience from neighboring solar projects, are not anticipated to result in any impacts. However, impacts from these facilities warrant further evaluation in the EIR.
- (f) If sensitive paleontological formations are located underground on the project site, ground disturbance could result in impacts to paleontological resources. A paleontological study for the project will be submitted. Therefore, further evaluation in the EIR is warranted to identify potential impacts and to formulate avoidance or mitigation measures, if applicable.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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VIII GREENHOUSE GAS EMISSIONS. Would the project:

- | | | | | |
|--|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

RESPONSES:

- (a) Greenhouse gas (GHG) emissions emitted by human activity are implicated in global climate change or global warming. The principal GHGs are CO₂, methane (CH₄), NO_x, ozone, water vapor, and fluorinated gases. The temporary construction activities associated with the project, which would involve operation of heavy off-road equipment, on-road trucks (for deliveries and hauling), and construction worker commute trips, would generate GHGs. However, as a solar renewable energy facility, the project is expected to displace traditional sources of electricity production that involves combustion energy sources (e.g., burning coal, fuel oil, or natural gas). As such, the provision of clean, renewable energy by the project would produce GHG-free electricity that is anticipated to offset GHGs that would otherwise be generated by traditional sources of electricity. The potential impacts associated with GHG emissions generated during construction of the project and the potential GHG offsets resulting from operation of the project will be further evaluated in the EIR.
- (b) California has passed several bills and the governor has signed at least three executive orders regarding GHGs. Assembly Bill (AB) 32 (the Global Warming Solutions Act) was passed by the California legislature on August 31, 2006, and requires the state's global warming emissions to be reduced to 1990 levels by 2020. The reduction will be accomplished through an enforceable statewide cap on GHG emissions that was phased in starting in 2012.

In 2002, California established its Renewable Portfolio Standards (RPS) Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent renewable energy by 2017. In 2006, under SB 107, the RPS Program codified the 20 percent goal. The RPS Program requires electric utilities and providers to increase procurement from eligible renewable energy resources by at least one percent of their retail sales annually until they reach 20 percent by 2017. On November 17, 2008, the governor signed Executive Order S-14-08, requiring California utilities to reach the 33 percent renewable goal by 2020. In 2015, SB 350 was enacted to increase the RPS to 50 percent and reduce greenhouse gas emissions by 40 percent by the year 2030. The project is intended to: (1) reduce importation of power from fossil fuel power plants and (2) contribute to a reduction in GHGs. Heavy equipment operation, truck deliveries, and construction worker commute trips associated with construction of the proposed project would temporarily generate GHGs; however, operation of the project would offset GHGs generated by traditional sources of electricity. The project's potential GHG impacts and the potential GHG offsets resulting from operation of the project will be further evaluated in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS.				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within the adopted Kern County Airport Land Use Compatibility Plan, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IX HAZARDS AND HAZARDOUS MATERIALS. (Continued)					
h) Would implementation of the project generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste?					
Specifically, would the project exceed the following qualitative threshold:					
The presence of domestic flies, mosquitoes, cockroaches, rodents, and/or any other vectors associated with the project is significant when the applicable enforcement agency determines that any of the vectors:					
i. Occur as immature stages and adults in numbers considerably in excess of those found in the surrounding environment; and		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Are associated with design, layout, and management of project operations; and		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Disseminate widely from the property; and		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Cause detrimental effects on the public health or well being of the majority of the surrounding population.		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES:

- (a) The project would not involve the routine transport, use, or disposal of hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act and is not expected to create a significant hazard to the public or the environment. During construction, the project would include the transport of general construction materials (i.e., concrete, wood, metal, fuel, etc.) as well as materials necessary to construct the proposed PV arrays. Project-related infrastructure would not emit hazardous materials or be constructed of acutely hazardous materials or substances that could adversely impact the public or on-site workers. Wastes generated during construction of the project would also be non-hazardous, and would consist of cardboard, wood pallets, copper wire, scrap steel, common trash, and wood wire spools. Although field equipment used during construction activities could contain various hazardous materials (i.e., hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives, paints, etc.), these materials are not considered to be acutely hazardous and would be used in accordance with the manufacturers' specifications and all applicable regulations.



The project would be subject to all local, state, and federal laws pertaining to the use of hazardous materials on the site and would be subject to review by the Kern County Public Health Services Department/Environmental Health Services Division.

The PV panels include semiconductor materials, such as cadmium telluride or Crystalline or amorphous silicon, which are encapsulated within the PV panels. The chemical properties of the semiconductor materials and the construction of the PV panels minimize risk of exposure to human health or the environment. Broken PV panels will be replaced and disposed of off-site in compliance with local, state, and federal laws, and would therefore not be a source of pollution or threat to human health or the environment. Impacts resulting from the transport, use, or disposal of hazardous materials during construction and operation of the proposed project will be evaluated further in the EIR.

- (b) The proposed project would be subject to all local, state, and federal laws pertaining to the use, storage, and disposal of hazardous and non-hazardous materials on the project site and would be subject to review by the Kern County Environmental Health Services Division. However, construction and operation of the project may include the accidental release of hazardous materials, such as cleaning fluids and petroleum products including lubricants, fuels, and solvents. In addition, the proposed project would also include an Energy Storage System (ESS) on each of the three facilities. Each ESS would consist of self-contained battery storage modules placed in racks, converters, switchboards, inverters, transformers, controls, and integrated heating, ventilation, and air conditioning (HVAC) units, all enclosed in one or more buildings or in prefabricated metal containers. If the ESSs use prefabricated metal containers, each container will be a 40-foot-long by 8-foot-wide battery container. Potential hazards associated with ESSs include increased potential for electrical shock and chemical release associated with the batteries used. The ESSs would have a fire rating in conformance with County standards and specialized fire suppression systems would be installed. Also, implementation of established construction controls and safety procedures would reduce the risk of hazardous materials spills and releases. Implementation of BMPs would ensure that hazardous materials used on site during operation would neither be released into the environment nor expose operational personnel to hazardous materials. Nevertheless, the potential impacts from reasonably foreseeable upset or accidental conditions will be further addressed in the EIR.
- (c) The project site is located in a predominantly rural and undeveloped part of Kern County. The nearest school is Tropico Middle School, located approximately 4.5 miles to the east. Additionally, the proposed project is a solar energy generation facility that involves using photovoltaic panels to generate electricity. Project-related infrastructure would not emit hazardous materials or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; however, this impact will be further evaluated in the EIR.
- (d) No known hazardous materials/facilities are located on or within the project site. However, a Phase I Environmental Site Assessment (ESA) will be prepared pursuant to Government Code Section 65962.5. The Phase I ESA will include a search of the subject parcels in the California Environmental Protection Agency (CalEPA) Cortese List, the California Department of Toxic Substances and Control (DTSC) Envirostor database of hazardous substances release sites, and Geotracker, the California database of leaking underground storage tanks. Although no significant impacts are anticipated, there is the potential for the discovery of unknown hazardous materials. Therefore, the impacts from hazardous material sites are considered potentially significant and will be further analyzed in the EIR.



- (e) The project area is not located within an area covered by the Kern County Airport Land Use Compatibility Plan (ALUCP). The nearest airports to the project sites are the privately owned Rosamond Skypark approximately 5.5 miles to the east, the Mojave Air and Space Port approximately 15 miles to the northeast, and the Mountain Valley Airport (a private airport which allows private access) approximately 15 miles to the north. Safety hazards are not anticipated for people residing or working in the project area with respect to the project's proximity to an airport. Therefore, there would be no anticipated impacts related to proximity to an airport.
- (f) The project would not interfere with any existing emergency response plans, emergency vehicle access, or personnel access to the project site. The project site is located in a remote area with several alternative access roads allowing access to the project site in the event of an emergency. Access would be maintained throughout construction, and appropriate detours would be provided in the event of potential road closures. Therefore, no impacts related to impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan are anticipated.
- (g) Construction and operation of the proposed project would not result in increased risk of wildfires in the area. The California Department of Forestry and Fire Protection (CalFire) publishes Fire Hazards Severity Zone Maps for the State Responsibility Areas (SRA), however the project site is not within a State Responsibility Area. The project site is in a local responsibility area (LRA), in which the County of Kern is responsible for providing fire protection. The Kern Multi Jurisdiction Hazard Mitigation Plan identifies the project site as lying within two LRA Fire Severity Zones: (a) moderate and (b) non-wildland/non-urban. The project would comply with all applicable wildland fire management plans and policies established by CalFire and the Kern County Fire Department (KCFD). Accordingly, the project is not expected to expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Although impacts are anticipated to be less than significant, further analysis of this issue will be discussed in the EIR.
- (h)(i.-iv.) Project-related infrastructure is not expected to result in features or conditions that could potentially provide habitat for vectors such as mosquitoes, flies, cockroaches, or rodents. During construction and operation, workers would generate small quantities of solid waste (i.e., trash) that would be transported to and disposed of at approved disposal facilities. Construction and operation of the proposed solar arrays and associated facilities would not produce excessive wastes or other features that would attract nuisance pests or vectors, however, retention ponds, detention ponds, and temporary lined basins would be a source of standing water. Although impacts are anticipated to be less than significant, further analysis of this issue will be provided in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
X HYDROLOGY AND WATER QUALITY.				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) result in a substantial erosion or siltation on – or off-site	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate of amount of surface runoff in a manner which would result in flooding on- or off-site;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) impeded or redirect flood flows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, seiche zones, risk release of pollutants due to project inundation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



RESPONSES:

- (a) The project site is within the Lahontan Regional Water Quality Control Board (RWQCB) jurisdiction. Project construction activities have the potential to result in erosion, sedimentation, and discharge of construction debris, and could result in the discharge of wastewater and urban runoff at the project site. If not properly managed, this wastewater could violate the water quality standards or waste discharge requirements of the RWQCB, or otherwise degrade surface or ground water quality. However, as noted in Geology (b), above, in compliance with the Kern County permit requirements, appropriate BMPs would be implemented to reduce potential water quality impacts. To reduce sediment production and storm water pollution, the project proponent would prepare and implement a project-specific drainage control plan, if necessary, which would include applicable BMPs to reduce the potential for erosion and sedimentation that could result from construction of the project. Erosion controls consist of source control measures that are designed to prevent soil particles from detaching and being transported by or in storm water runoff. Therefore, impacts related to water quality during construction would be considered less than significant. Although significant impacts related to water quality are not anticipated during construction, a comprehensive drainage study will be included in the EIR. The project would develop areas of impervious surfaces on the project site, including foundation pads for inverters, switchgear, transformers, as well as three O&M buildings, each with a graveled parking area. These impacts will be addressed further in the EIR.
- (b) During the construction, operational, and decommissioning phases of the proposed project, water for site preparation and dust suppression will be supplied from one or more of the following options:
1. Potential and/or existing well(s) on each individual facility site and/or well(s) shared by one or more of the three facilities.
 2. Existing well(s) on the Willow Springs Solar Project site. If water is supplied from the Willow Springs Project site it will be piped via pipeline(s) or trucked.
 3. A potential well drilled on the Willow Springs Solar Project site, APN 359-031-57.
 4. Trucked Antelope Valley-East Kern Water Agency (AVEK) water collected at one of the nearby locations owned by AVEK.

Additional potable water may be delivered for O&M staff consumption. Approximately 900 acre-feet of water would be required during the construction phase. The estimated demand for operation of the facility, including toilets and handwashing facilities and periodic PV module washing is 30 acre-feet per year. A water supply assessment will be completed for the project to analyze potential impacts to groundwater. These impacts will be addressed further in the EIR.

- (c)(i-iv) The project site has elevations ranging from 2,300 to 2,800 feet. The project site will be minimally graded to ensure a consistent and level grade that would avoid water collection and ponding. Where feasible, mowing or “disk and roll” techniques will be utilized. Although no known stream course will be altered as a result of the project, a hydrology study will be prepared for the project in accordance with Kern County requirements. The project is not expected to significantly affect the flow patterns of any existing drainage courses in the vicinity. Additionally, the selected solar panel technology creates minimal obstruction to the existing sheet flow pattern of storm flows on the site. As noted in (a) above, the project proponent would prepare and implement a project-specific drainage control plan, if necessary, which would include applicable BMPs to reduce the potential for erosion and sedimentation that could result



from construction of the project. There would be a slight increase in imperviousness of the soil on the site due to minor grading, construction and compaction activities, and could result in an increase in sheet flow across the site. A storm water pollution prevention plan (SWPPP) and/or Drainage Control Plan, as necessary, would be prepared that will provide proper control and treatment of any stormwater prior to discharge. The project is not anticipated to result in potentially significant impact in regard to flooding on-site or off-site. These impacts will be addressed further in the EIR.

- (d) The project is not located near an ocean or enclosed body of water, and therefore would not be subject to inundation by seiche or tsunami. Mudflows are a type of mass wasting or landslide, where earth and surface materials are rapidly transported downhill under the force of gravity, and are often triggered by heavy rainfall and soil that is not able to sufficiently drain or absorb water and the super-saturation results in soil and rock materials to become unstable and slide away. Due to the relatively flat topography of the project and surrounding area, the potential to be inundated by mudflow is considered remote. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), the entire project site is designated as Zone A, meaning the area subject to inundation by the one percent chance flood event. The 100-year flood, also known as the base flood, is the flood that has a one percent chance of being equaled or exceeded in any given year. The project would be reviewed by the Kern County Public Works Department for adherence to all applicable floodplain management standards. Further analysis is required in the EIR.
- (e) As discussed in item (b) above, water demand during the project's construction phase would be limited to site preparation and dust suppression and for use by construction personnel. Approximately 900 acre-feet of water would be required during the construction phase. The estimated demand for operation of the facility, including toilets and handwashing facilities and periodic PV module washing is 30 acre-feet per year. Water for operational use would also be trucked to the site or from new or existing wells located on the project site or shared with nearby projects. A water supply assessment will be completed for the project to analyze potential impacts to groundwater. Relative to a sustainable groundwater management plan, the project site is located within the Antelope Valley Groundwater Basin. The Antelope Valley Groundwater Basin is an adjudicated basin, with all water rights having been previously prescribed. As such, all water usage for the project will conform to existing adjudication plans. This impact will be further analyzed in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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XI. LAND USE AND PLANNING.

Would the project:

- | | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

RESPONSES:

- (a) The project would be developed on primarily open desert land, and active or fallow agricultural land. The surrounding area is primarily open desert, permitted solar energy generating facilities, or land in agricultural production. There are scattered residentially developed properties surrounding the project site. The nearest community (Rosamond) is located approximately 5.5 miles to the east of the project site. The project is not anticipated to physically divide or restrict access to the Community of Rosamond or any other community.
- (b) The project is located within the Willow Springs Specific Plan area and has map code designations of 5.3/2.85 (Maximum 10 units/net acre/Noise Management Area (65db)), 5.3/4.4 ((Maximum 10 units/net acre / Comprehensive Planning Area), 5.3/4.4/2.1 (Maximum 10 units/net acre/ Comprehensive Planning Area/ Seismic Hazard), 5.6 (Minimum 2.5 gross acres/unit), 5.6/2.8 (Minimum 2.5 gross acres/unit/Military Flight Operations (60db)), 5.6/2.85 (Minimum 2.5 gross acres/unit/Noise Management Area (65db)), 5.7 (Minimum 5 gross acres/unit), 5.75 (Minimum 10 gross acres/unit) 6.2 (General Commercial), 8.1/2.8 (Intensive Agriculture (Minimum 20-acre Parcel Size)/Military Flight Operations (60db)), 8.1/2.85 (Intensive Agriculture (Minimum 20-acre Parcel Size)/Noise Management Area (65db)), and 8.5 (Resources Management (Minimum 20-acre parcel size)), as shown on **Figure 5, Existing Willow Springs Specific Plan Designations**. As proposed, the map code designation of the project site would be revised to 8.1, 8.1/2.1, 8.1/2.8 and 8.1/2.85, with the exception of those portions which already have a map code designation of 8.1, as shown on **Figure 6, Proposed Willow Springs Specific Plan Designations**. Solar energy-generating facilities are an allowable use under the 8.1 map code designation.

The site is zoned E(2 ½) RS FPS (Estate (2 ½ Acres) – Residential Suburban Combining – Floodplain Secondary Combining), E(5) RS FPS (Estate (5 Acres) – Residential Suburban Combining – Floodplain Secondary Combining), E(10) RS FPS (Estate (10 Acres) – Residential Suburban Combining – Floodplain Secondary Combining), A FPS (Exclusive Agriculture – Floodplain Secondary Combining), and A GH FPS (Exclusive Agriculture – Geologic Hazard – Floodplain Secondary Combining). Existing zoning is shown on **Figure 7, Existing Zoning**, and proposed zoning is shown on **Figure 8, Proposed Zoning**. As proposed, the site would be rezoned to A FPS, with the exception of those portion which already in the A Zone District.

The project proponents are requesting three CUPs to allow for the construction and operation of three approximately 125-MW solar facilities, and three CUPs to allow communication tower(s) in



conjunction with the solar facilities. According to the Kern County Zoning Ordinance Section 19.12.030 G, solar energy electrical generators when not accessory to a permitted or conditionally permitted use, are permitted within the A Zone District subject to securing a CUP. According to the Kern county Zoning Ordinance Section 19.12.030.F, communication towers are also permitted within the A Zone District subject to securing a CUP.

The project proponents also requested four Specific Plan Amendments to amend the Willow Springs Specific Plan Circulation Plan, to eliminate the future road reservations, as shown on **Figure 9**, *Amendment to Willow Springs Specific Plan Circulation Plan*.

The project proponents also requested three Nonsummary Vacations to request vacation of public access easement(s), as shown on **Figure 10**, *Proposed Nonsummary Vacation of Public Access Easements*.

The proposed zoning classification of the project site is consistent with the proposed Willow Springs Specific Plan map code designations. Therefore, with approval of the requested CUPs, the project would not have the potential to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. An evaluation will be presented in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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XII. MINERAL RESOURCES. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

RESPONSES:

- (a) The project site is not: (a) designated as a mineral recovery area by the Willow Springs Specific Plan, (b) identified as a mineral resource zone by the Department of Conservation's State Mining and Geology Board, or (c) designated by the Department of Oil, Gas and Geothermal Resources (DOGGR) recognized oil field. Construction and operation of the proposed project would not interfere with mineral extraction and processing, and would not have significant impacts on future mineral development.
- (b) As previously mentioned, the project site is not located within a mineral recovery site designated by the Willow Springs Specific Plan. The project site is not located within the NR (Natural Resources) or PE (Petroleum Extraction) zoned districts. Therefore, the installation of the solar facilities would not preclude future mineral resource development nor would it result in the loss of a locally important mineral resource recovery site.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in the ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of, excessive ground borne vibration or ground borne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) For a project located within the Kern County Airport Land Use Compatibility Plan, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

RESPONSES:

- (a) Land uses determined to be “sensitive” to noise as defined by the Kern County General Plan include residential areas, schools, convalescent and acute care hospitals, parks and recreational areas, and churches. There are several residences near the project boundaries.
- Construction activity associated with the operation of heavy equipment, including post driving, has the highest potential for creating noise. A noise analysis will be included in the EIR to determine the project's consistency with the Kern County Noise Ordinance (Kern County Code of Ordinances, Title 8, Chapter 8.36), the Willow Springs Specific Plan, and any other applicable regulations. Thus, further analysis of this impact will be analyzed in the EIR.
- (b) Groundborne vibration and groundborne noise could originate from the operation of heavy off-road equipment during the construction phase of the project. The project will utilize impact/vibrating post drivers for panel racking construction. The project would be expected to comply with all applicable requirements for long-term operation, as well as with measures to reduce excessive groundborne vibration and noise to ensure that the project would not expose persons or structures to excessive groundborne vibration. Operation of the proposed project is anticipated to emit minimal groundborne vibration and/or noise. Further analysis of groundborne vibration and groundborne noise will be included in the EIR.
- (c) Due to the quiet nature of solar facilities, operation of the project would generate very little noise. Traffic during the operational phase of solar facility would be for routine access and maintenance activities and would primarily consist of personal vehicles for a small maintenance crew. Nonetheless, a noise analysis will be included in the EIR to determine the project's consistency



with the Kern County Noise Ordinance (Kern County Code of Ordinances, Title 8, Chapter 8.36), the Willow Springs Specific Plan, and any other applicable regulations. Thus, further analysis of ambient noise levels and the project's potential impact on those levels will be included in the EIR.

- (d) The proposed project is not located within the Kern County ALUCP. The nearest airports to the project sites are the privately owned Rosamond Skypark approximately 5.5 miles to the east, the Mojave Air and Space Port approximately 15 miles to the northeast, and the Mountain Valley Airport (a private airport which allows private access) approximately 15 miles to the north. Implementation of the proposed project is not anticipated to expose people residing or working in the area to excessive noise levels.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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XIV. POPULATION AND HOUSING.

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

RESPONSES:

- (a) Although the project would provide new employment consistent with the adopted Kern County General Plan goals, plans, and policies, long-term employment opportunities would be minimal. The project would include the construction of up to three unmanned O&M buildings; no permanent on-site employees are proposed or required to operate, maintain, or monitor the facilities. Maintenance personnel are expected to visit the project site several times per year for routine maintenance and periodic washing of PV modules.

The project would require an average of 688 daily on-site construction workers and approximately 1,455 construction workers at the peak of construction. The entire construction process is estimated to take 12 to 36 months. Construction workers are expected to travel to the site from various local communities and locations throughout Southern California, and the number of workers expected to relocate to the surrounding area is not expected to be substantial. If temporary housing should be necessary, it is expected that accommodations would be available in the nearby communities of Mojave, Rosamond, Lancaster, or other local communities and cities. Therefore, the project is not anticipated to directly or indirectly induce the development of any new housing or businesses. During the operational phase, the project would have up to 30 full-time equivalent (FTE) personnel (or personnel hours totaling 30 FTE positions, i.e., an average of 1,200 personnel hours per week), who would commute to the site. Existing housing stock would accommodate operations personnel should they relocate to the area. Impacts associated with population growth would not occur, and further analysis is not warranted.

- (b) The project would result in the demolition and removal of all five existing residences on the project site. This level of displacement is not substantial and would not necessitate the construction of replacement housing elsewhere. Thus, no further analysis of this impact will be included in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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XV. PUBLIC SERVICES.

Would the project:

- a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services:

i) Fire Protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Police Protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

RESPONSES:

- (a) (i) Fire suppression and emergency medical services are provided by the Kern County Fire Department (KCFD). The primary fire station that would serve the project site is the Rosamond Station located at 3219 35th West Street in Rosamond. Adherence to all applicable regulations would reduce wildfire ignitions and prevent the spread of wildfires. However, project construction and operation activities may result in increased need for firefighting personnel and facilities. Given the location of the project in the rural environment and KCFD's obligation to respond to all structure fires in their jurisdiction, fire-fighting capacity in the project area could result in potential impacts on fire services from construction and operation of the solar facilities. This will be evaluated in the EIR.
- (ii) Law enforcement services in the project area are provided by the Kern County Sheriff's Office (KCSO). The closest station to the project site is the Rosamond Substation located at 3179 35th Street West. Although the potential is low, the project may attract vandals or other security risks, and construction activities would result in increases in traffic volumes along surrounding roads, which could increase demand on law enforcement services. Access would be limited to the project during construction and operation, thereby minimizing the need for police services; nonetheless, the project's impacts on sheriff services are potentially significant and will be evaluated in the EIR.
- (iii) The entire construction process is estimated to occur over the course of a 12–36 month period. An average of 688 daily on-site workers, and a peak workforce of 1,455 workers could be required



for project construction. It is expected most of these workers would live in the region and would commute to the project site from where their children are already enrolled in school. Even if workers came from out of the area, they would likely return to their out-of-town residences once the facilities were built and would not take their children out of their current schooling situation. Therefore, temporary increases in population are not expected to adversely affect local school populations. Additionally, operation of the project would require approximately 30 FTE workers. Employees would likely commute to the project from their existing permanent residences, however, even if the maintenance employees were hired from out of the area and had to relocate to eastern Kern County, the resulting addition of potential families to this area would not result in a substantial increase in the number of users at local schools.

- (iv-v) The temporary workers during the construction period (an average of 688 workers and a peak workforce of 1,455 workers) would not result in a substantial additional demand for parks or other public facilities such as post office, courthouse, and/or library services. Additionally, operation of the project would require approximately 30 FTE workers. Employees would likely commute to the project from their existing permanent residences, however even if the maintenance employees were hired from out of the area and relocated to eastern Kern County, the resulting potential addition of families to the area would not result in a substantial increase in the number of users of local parks.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

RESPONSES:

- (a)-(b) The project does not include new recreational facilities and would not appreciably increase demands on existing facilities. The average daily workforce during construction is expected to consist of 688 personnel, with a peak workforce of 1,455 personnel for short periods of time. The temporary increase in use of recreation facilities during construction that might be caused by an influx of workers would be minimal. Operation of the project would require employees for maintenance and monitoring activities but they would likely be drawn from the local labor force and would commute from their existing permanent residences to the project site during those times. However, even if the maintenance/monitoring employees were hired from out of the area and relocated to eastern Kern County, the resulting addition of families to this area would not result in a substantial increase in the number of users at local parks. As a result, there would not be a detectable increase in the use of parks or other recreational facilities. Impacts would not occur, and further analysis is not warranted in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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XVII. TRANSPORTATION

Would the project:

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|--|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict or be inconsistent with CEQA Guidelines § 15064.3 (b) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

RESPONSES:

- (a) The surrounding roadway system is characterized by two-lane rural streets with minimal traffic. Construction activities associated with the project would temporarily contribute to traffic volumes on these nearby roadways. Worker commute vehicles would account for the majority of traffic trips to the site. During the construction phase, it is estimated there would be an average of approximately 688 passenger vehicle trips per day, and a peak of approximately 1,455 passenger vehicle trips per day for workers commuting to and from the project site. Construction is also estimated to generate an average of 52 truck trips per day (26 daily round trips) for delivery of construction equipment and materials. It is anticipated that the decommissioning phase of the project would take four months to complete; daily vehicle trips during the decommission phase are anticipated to be equal to those during the construction phase. Operation of the project would require up to 30 FTE employees, who would commute to the site. Trip generation during the operational phase, which also includes occasional truck deliveries during maintenance activities, would not likely result in a substantial increase in traffic in relation to the existing roadway capacity nor congestion at intersections. Project-generated traffic would result in vehicle miles traveled (VMT) and will therefore need to be analyzed for consistency with state and local guidance.

The project includes four requests to amend the Willow Springs Specific Plan Circulation Plan to eliminate future road reservations as shown on **Figure 9, Amendment to Willow Springs Specific Plan Circulation Plan**. Additionally, the project includes three nonsummary vacation requests to vacate public access easements as shown on **Figure 10, Proposed Nonsummary Vacation of Public Access Easements**. Unlike summary vacations (for which it has been confirmed no public utility easement(s) are within the boundaries of the proposed vacation), for nonsummary vacations it has been confirmed (or there is the potential) that utility easement(s) are within the boundaries of the proposed vacations. The project site would obtain access from existing roads as shown on **Figure 11, Project Boundary/SCE Interconnection (Option 1)**, **Figure 12, Project**



Boundary/LADWP Interconnection (Option 2a), and Figure 13, Project Boundary/LADWP Interconnection (Option 2b). The impact will be evaluated further in the EIR.

- (b) As described in (a), above, the proposed project would generate vehicle trips. Thus, the proposed project has the potential to exceed any LOS standard established by the County Congestion Management Plan for designated roads and highways. Implementation of the proposed project would generate traffic on the existing roadway network. As such, impacts are considered potentially significant. This impacts will be discussed and analyzed in the EIR.
- (c) The project proposes access from existing roads. For the Chaparral Site, the project proposes access to be available from Rosamond Boulevard, 100th Street West and 110th Street West. For the Rabbitbrush Site, the project proposes access to be available from Rosamond Boulevard, 120th Street West and 130th Street. For the Chaparral Site, the project proposes access to be available from Gaskell Road and Avenue A.

As shown in **Figure 14, Chaparral Facility Layout, Figure 16, Rabbitbrush Facility Layout, and Figure 18, Tumbleweed Facility Layout**, chain-link security fencing would be installed around the perimeter of the facilities and other areas requiring controlled access, prior to commencement of construction, in order to restrict public access during construction and operations. Additionally, the project would not include the development of sharp curves, dangerous intersections or other hazardous design features. The project would be set back from the roadways as required by Kern County Zoning Ordinance. Therefore, there are no anticipated increase in hazards due to a design feature or incompatible uses.

- (d) As described in item (a) above, construction of the project would generate vehicle trips, which could temporarily increase the daily traffic volumes on local roadways and intersections. However, the project would not physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the site. The project site and vicinity are accessible via a number of existing roads, with alternative access roads allowing easy access in the event of an emergency. Therefore, no adverse impacts related to impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan is anticipated. Impacts are considered less than significant but will be discussed in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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XVIII. TRIBAL CULTURAL RESOURCES.

Would the project:

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Sec.21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources defined in Public Resources Code section 5020.1 (k) or ☒ ☐ ☐ ☐

ii) A recourse determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native America tribe. ☒ ☐ ☐ ☐

RESPONSES:

- (a)(i–ii) The proposed project has the potential to impact tribal cultural resources. All tribes with possible cultural affiliation and interest within the project area will be notified, per Assembly Bill 52. Further evaluation in the EIR is warranted to identify potential impacts to tribal cultural resources and to formulate avoidance or mitigation measures, if applicable.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS.				
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES:

- (a) As proposed, the proposed project would include the following restroom facilities:
- Restroom facilities inside of commercial coaches (served by water supply line and septic system).
 - Restroom facilities inside of O&M buildings (served by water supply line and septic system).
 - Portable toilets (not served by water supply line, not served by septic system). These portable toilets would be serviced by truck, and any waste generated would be disposed of at an approved off-site disposal facility.
 - Portable hand-washing facilities (not served by water supply line, not served by septic system). These portable hand washing facilities would be serviced by truck, and any wastewater generated would be disposed of at an approved off-site disposal facility.



No new or expanded wastewater treatment facilities would be required, since wastewater generated by the project would be disposed of on-site by septic system or transported to an approved off-site disposal facility. Water used for dust control and for washing the solar panels would be retained on-site and allowed to percolate into the earth. Although the project is not proposing construction of any new or expanded water or wastewater treatment facilities, further analysis is warranted in the EIR.

- (b) Construction of the project would require approximately 900 acre-feet of water. It is expected that operation of the project would require approximately 30 acre-feet of water per year per site. During the construction, operational, and decommissioning phases of the proposed project, water for the three solar facilities will be supplied from one or more of the following options:
1. Potential and/or existing well(s) on each individual facility site and/or well(s) shared by one or more of the three facilities.
 2. Existing well(s) on the Willow Springs Solar Project site. If water is supplied from the Willow Springs Project site, it will be piped via pipeline(s) or trucked.
 3. A potential well drilled on the Willow Springs Solar Project site, APN 359-031-57.
 4. Trucked Antelope Valley-East Kern Water Agency (AVEK) water collected at one of the nearby locations owned by AVEK.

Additionally, potable drinking water would be brought to the site during the construction phase. The project is not anticipated to impact water supplies and new or expanded entitlements would not be required. However, further analysis is warranted in the EIR.

- (c) The project is not expected to generate a significant amount of wastewater. As previously indicated, wastewater would be generated as follows:
- Restroom facilities inside of commercial coaches (served by water supply line and septic system).
 - Restroom facilities inside of O&M buildings (served by water supply line and septic system).
 - Portable toilets (not served by water supply line, not served by septic system). These portable toilets would be serviced by truck, and any waste generated would be disposed of at an approved off-site disposal facility.
 - Portable hand washing facilities (not served by water supply line, not served by septic system). These portable hand washing facilities would be serviced by truck, and any wastewater generated would be disposed of at an approved off-site disposal facility.

Therefore, wastewater generated would be negligible and would not exceed wastewater treatment capacity of any treatment providers. Impacts would be less than significant.

- (d) The proposed project is not expected to generate a significant amount of waste that would exceed the capacity of local landfills. Materials brought to the project site would be used to construct facilities, and few residual materials are expected. Non-hazardous construction refuse and solid waste would be either collected and recycled or disposed of at a local Class III landfill, while any hazardous waste generated during construction would be disposed of at an approved location. The



closest Class III municipal landfill is the Mojave Recycling and Sanitary Landfill (RSLF), which is located approximately 12 miles northeast of the project. It is not anticipated that the amount of solid waste generated by the proposed project would exceed the capacity of local landfills. Further analysis of this issue will be included in the EIR.

- (e) The project would generate solid waste during construction, operation, and decommissioning, thus requiring the consideration of waste reduction and recycling measures. The 1989 California Integrated Waste Management Act (AB 939) requires Kern County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the proposed project design. The proposed project would be required to comply with the 1989 California Integrated Waste Management Act and the California Solid Waste Reuse and Recycling Access Act of 1991. Further analysis of this issue will be included in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, or other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES:

- (a) The California Department of Forestry and Fire Protection (CalFire) publishes Fire Hazards Severity Zone Maps for the SRAs, however, the project site is not located within an SRA. The project site is located in an LRA, in which the County of Kern is responsible for providing fire protection. The Kern Multi Jurisdiction Hazard Mitigation Plan identifies the project site as lying within two LRA Fire Severity Zones: (a) moderate, and (b) non-wildland/non-urban. The project would not interfere with any existing emergency response plans, emergency vehicle access, or personnel access to the project site. The project site is located in a remote area with several alternative access roads allowing access to the project site in the event of an emergency. Access would be maintained throughout construction, and appropriate detours would be provided in the event of potential road closures. Therefore, impacts related to impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan are expected to be less than significant. Nevertheless, further analysis will be conducted in the EIR.
- (b) The project site is located within a relatively flat area, the project site is not anticipated to expose project occupants to pollution concentrations from a wildfire or the uncontrolled spread of a wildfire due to slopes, prevailing winds or other factors, or pollutant concentrations from a



wildfire or the uncontrolled spread of a wildfire. The project would comply with all applicable wildland fire management plans and policies established by CalFire and the Kern County Fire Department (KCFD). Although impacts are anticipated to be less than significant, further analysis will be discussed in the EIR.

- (c) The project would construct infrastructure that requires fire protection and, as a result, will include fire prevention and suppression measures and equipment. The building would have appropriate fire suppression systems built to applicable state and local code requirements. The project operator will develop and implement a fire safety plan for use during construction, operation, and decommissioning. Fire protection measures would include the use of portable carbon dioxide (CO₂) fire extinguishers, which would be mounted outside the electrical enclosures that contain the inverters and medium-voltage transformers. Additional fire protection measures would be implemented per the applicable state and local fire code and requirements. Within the solar arrays, vegetation would be controlled to minimize fire risk using mechanical methods. For the generation-tie lines, clearances for vegetation would be maintained in accordance with California Public Utilities Commission General Order 95 (Rules for Overhead Electric Line Construction). This issue will be further analyzed in the EIR.
- (d) The project site is not considered to be a high risk area for landslides as it is relatively flat and is not subject to post-fire slope instability, or drainage changes that would expose people or structures to significant risks. A hydrology study would be prepared for the project in accordance with Kern County requirements and a SWPPP and/or Drainage Control Plan, as necessary, would be prepared for the project.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

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|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

RESPONSES:

- (a) The EIR's biological, cultural and tribal cultural resources sections will discuss specific project impacts on plants and wildlife including avian species, and impacts to cultural and tribal cultural resources. The document will also evaluate the project's contribution to cumulative biological, cultural and tribal cultural resources impacts and propose mitigation that will reduce the impacts to less-than-significant levels, where feasible.
- (b) The project has the potential to cumulatively contribute to aesthetics, air quality, biological resources, cultural resources, tribal cultural resources, greenhouse gas emissions, and traffic impacts. The EIR will evaluate the project's contribution to cumulative impacts in these and other areas.
- (c) The proposed project would not result in the long-term operation of any emission sources that would adversely affect nearby sensitive receptors. However, short-term construction activities could result in temporary increases in pollutant concentrations. Pollutants of primary concern commonly associated with construction-related activities include toxic air contaminants, asbestos, and fugitive dust. Within the project area, the potential for increased occurrences of Valley Fever is also of concern. Human health impacts from the short-term cumulative contribution to air quality impacts will be further evaluated in the EIR.