Final
Environmental Impact Report

SCH# 2025081409

Volume 6

Chapter 7 – Response to Comments

Galaxy Solar PV & Storage Project
by Galaxy Solar Storage, LLC
(*PP25404)*

GPA No. 7, Map 212;
ZCC No. 5, Map 195; ZCC No. 57, Map 197; ZCC No. 4, Map 212 ZCC No. 5, Map 212;
CUP No. 4, Map 195; CUP No. 5, Map 195; CUP No. 24, Map 197; CUP No. 7, Map 212;
ZV No. 1, Map 195; ZV No. 2, Map 212; ZV No. 21, Map 197;
GPA No. 5, Map 195 (Circulation); GPA No. 6, Map 212 (Circulation);
Vesting Tentative Parcel Maps (Multiple)

Kern County
Planning and Natural Resources Department
Bakersfield, California

July 2026

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KERN COUNTY
Planning & Natural Resources

Craig M. Murphy, Director
2700 "M" Street, Suite 100
Bakersfield, CA 93301-2323
Phone: (661) 862-8600
TTY Relay 1-800-735-2929
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Web Address: https://kernplanning.com

July 31, 2026

FILE: ZCCs, CUPs, ZVs, GPAs, and VTPMs
Maps No. 195, 197, 212
S.D. # 2 - Parlier

To: Commenting Agencies and Interested Parties/Persons (See Attached Mailing List)

RE: Response to Comments for the Draft Environmental Impact Report – Galaxy Solar PV & Storage Project by Galaxy Solar Storage, LLC. (PP25404)

Dear Agency or Interested Party:

This is to advise that the Kern County Planning and Natural Resources Department has prepared a document entitled Volume 6 – Chapter 7 – Response to Comments for the above referenced proposed project. Section 15088 of the California Environmental Quality Act (CEQA) Guidelines requires the Lead Agency to evaluate comments on environmental issues received from persons who reviewed the Draft Environmental Impact Report (EIR) and prepared written responses addressing each comment. This document has been posted with the State Clearinghouse, Kern County Clerk, and provided to commenting agencies and interested parties/persons by mail at least 10 days prior to the scheduled Planning Commission Hearing.

As noted previously, this document is Chapter 7 of the EIR and is available for review at the Planning and Natural Resources Department, which is located at 2700 "M" Street, Suite 100, Bakersfield, CA 93301 or on the Department website at: **https://kernplanning.com/environmental-doc/galaxy-solar-pv-storage-project/**.

A public hearing was originally scheduled with the Kern County Planning Commission to consider the proposed project on July 23, 2026 at 7:00 p.m., or soon thereafter, at the Chambers of the Board of Supervisors, First Floor, Kern County Administrative Center, 1115 Truxtun Avenue, Bakersfield, California 93301. However, the project has been continued to the August 27, 2026 Planning Commission hearing at the aforementioned time and location.

Thank you for your participation in the environmental process for this proposed project. Should you have any questions regarding this proposed project, please do not hesitate to contact me at (661) 862-5041 or **TolentinoM@kerncounty.com**.

Sincerely,

Mark Tolentino
Planner III - Advanced Planning Division
Kern County Planning and Natural Resources Department

Commenting Agencies and Interested Persons: Robert K. and Kathryn M. Dyas; State Dept of Conservation Geologic Energy Management Division; Kern County Superintendent of Schools; Yuhaaviatam of San Manuel Nation; Caltrans District 9; Roy Woolsey; Twenty-Nine Palms Band of Indians; Kern County Fire Department; SoCal Gas; Defenders of Wildlife/California Native Plant Society; California Department of Fish and Wildlife

Galaxy Solar PV & Storage Project
SCH# 2025081409 (PP25404)

Response to Comments – Agencies and Interested Parties

State Dept of Conservation
Geologic Energy Management Division
11000 River Run Boulevard
Bakersfield, CA 93311

Robert K. and Kathryn M. Dyas
P.O. Box 687
Rosamond, CA 93560

Kern County Superintendent of Schools
Attention School District Facility Services
1300 - 17th Street
Bakersfield, CA 93301

Yuhaaviatam of San Manuel Nation
Attn: Eunice Ambriz-Aguilar
26569 Community Center Dr
Highland, California 92346

244 233 17 00 6
WOOLSEY ROY B TRUST
26649 SNELL LN
LOS ALTOS HILLS CA 94022-2039

Twenty-Nine Palms Band of Mission Indians
46-200 Harrison Place
Coachella, CA 92236

Kern County Fire Department

SoCalGas
9400 Oakdale Ave
Chatsworth, CA 91311

Defenders of Wildlife
P.O. Box 401
Folsom, CA 95763

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

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

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 # 2025081409

Project Title: Galaxy Solar PV & Storage Project by Galaxy Solar Storage, LLC (Terra-Gen)

Lead Agency: Kern County Planning and Natural Resources Department
Contact Person: Mark Tolentino, Planner III
Mailing Address: 2700 M Street, Suite 100
Phone: 661-862-5041
City: Bakersfield
Zip: 93301
County: Kern County

Project Location: County: Kern
City/Nearest Community: Mojave, California City
Cross Streets: 39th Street and Sunset Avenue
Zip Code: 93501
Longitude/Latitude (degrees, minutes and seconds): 34 ° 59 ′ 57.72 ″ N / 118 ° 3 ′ 34.53 ″ W
Total Acres: 3,519
Assessor's Parcel No.: 235-132-14; Multiple
Section: Multiple
Twp.: 10N & 11N
Range: 11W
Base: SBBM
Within 2 Miles: State Hwy #: SR-58
Waterways: N/A
Airports: Mojave Air and Space Port
Railways: BNSF Railway
Schools: Mojave Jr/Sr High

Document Type:

CEQA: ☐ NOP ☐ Draft EIR
☐ Early Cons ☐ Supplement/Subsequent EIR
☐ Neg Dec (Prior SCH No.) _____
☐ Mit Neg Dec Other: Ch 7 - Response to Comments/FEIR

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other: _____

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 Variance

Development Type:

☐ Residential: Units _____ Acres _____
☐ Office: Sq.ft. _____ Acres _____ Employees _____
☐ Commercial: Sq.ft. _____ Acres _____ Employees _____
☐ Industrial: Sq.ft. _____ Acres _____ Employees _____
☐ Educational: _____
☐ Recreational: _____
☐ Water Facilities: Type _____ MGD _____

☐ Transportation: Type _____
☐ Mining: Mineral _____
■ Power: Type Solar MW 600
☐ Waste Treatment: Type _____ MGD _____
☐ Hazardous Waste: Type _____
■ Other: Battery Energy Storage Systems (BESS) - 4 GwH/1000 MW

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 ■ Growth Inducement
☐ Coastal Zone ■ Noise ■ Solid Waste ■ Land Use
■ Drainage/Absorption ■ Population/Housing Balance ■ Toxic/Hazardous ■ Cumulative Effects
■ Economic/Jobs ■ Public Services/Facilities ■ Traffic/Circulation ☐ Other: Tribal Cultural, Green House Gas

Present Land Use/Zoning/General Plan Designation:

Generally vacant/Various Zoning/Various General Plan Designations

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

The proposed Galaxy Solar PV & Storage Project is a photovoltaic (PV) solar facility with associated infrastructure necessary to generate up to to 600 megawatts (MW) of renewable electrical energy with up to 4 gigawatt-hours (GWh) of energy storage capacity (approximately 1,000 MW) on an approximate 3,519 acre project site, across 184 privately owned parcels, in an unincorporated area of southeastern Kern County. Associated project infrastructure includes an operations and maintenance (O&M) facility, telecommunication facilities, energy storage system(s), two onsite collector substations, and temporary laydown yards. The proposed project also includes a generation-tie (gen-tie) line to connect the project to the existing Windhub Substation.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

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 Historic Preservation
_____	Boating & Waterways, Department of	_____	Office of Public School Construction
_____	California Emergency Management Agency	_____	Parks & Recreation, Department of
_____	California Highway Patrol	_____	Pesticide Regulation, Department of
S	Caltrans District # 9	_____	Public Utilities Commission
_____	Caltrans Division of Aeronautics	_____	Regional WQCB # _____
_____	Caltrans Planning	_____	Resources Agency
_____	Central Valley Flood Protection Board	_____	Resources Recycling and Recovery, Department of
_____	Coachella Valley Mtns. Conservancy	_____	S.F. Bay Conservation & Development Comm.
_____	Coastal Commission	_____	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
_____	Colorado River Board	_____	San Joaquin River Conservancy
S	Conservation, Department of	_____	Santa Monica Mtns. Conservancy
_____	Corrections, Department of	_____	State Lands Commission
_____	Delta Protection Commission	_____	SWRCB: Clean Water Grants
_____	Education, Department of	_____	SWRCB: Water Quality
_____	Energy Commission	_____	SWRCB: Water Rights
S	Fish & Game Region # Fresno	_____	Tahoe Regional Planning Agency
_____	Food & Agriculture, Department of	_____	Toxic Substances Control, Department of
_____	Forestry and Fire Protection, Department of	_____	Water Resources, Department of
_____	General Services, Department of		
_____	Health Services, Department of	_____	Other: _____
_____	Housing & Community Development	_____	Other: _____
_____	Native American Heritage Commission		

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

Starting Date July 31, 2026 Ending Date August 27, 2026

Lead Agency (Complete if applicable):

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

Applicant: Galaxy Solar Storage, LLC (Terra-Gen)
Address: 4275 Executive Square Suite 400 Attn: Simon Day
City/State/Zip: San Diego CA 92037
Phone: 415-404-0807

Signature of Lead Agency Representative: _____ **Date:** 7/31/2026

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

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Kern County
Planning and Natural Resources Department
Bakersfield, California

July 2026

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Appendix N. Revised Project Design—Additional Environmental Information

Acronyms and Abbreviations

°F	degree Fahrenheit
µPa	micropascal
A	Exclusive Agriculture
A	Exclusive Agriculture (zoning district)
A-1 H	Heavy Agriculture
A-1	Limited Agriculture
AAQA	ambient air quality analysis
AC	alternating current
AC	alternating current
AD	Anno Domini
ADT	average daily traffic
AF	acre
AFB	Air Force Base
AFY	acre-feet per year
AGL	above ground level
AHJ	Authority Having Jurisdiction
ALUCP	Airport Land Use Compatibility Plan
ANSI	American National Standards Institute
APLIC	Avian Power Line Interaction Committee
APN	Assessor Parcel Number
APT	Antecedent Precipitation Tool
AQMD	air quality management district
AQMP	Air Quality Management Plan
AR	Assessment Report
AR4	Fourth Assessment Report
AR5	Fifth Assessment Report
AR6	Sixth Assessment Report
ASTM	ASTM International
ATCM	Airborne Toxic Control Measures

ATCT	air traffic control tower
AVEK	Antelope Valley East Kern Water Agency
AVGB	Antelope Valley Groundwater Basin
Basin Plan	Lahontan Region Water Quality Control Plan
BAU	Business As Usual
BBI	Bloom Biological, Inc.
BESS	battery energy storage system
bgs	below ground surface
BIOS	Biogeographic and Information Observation System
BLM	Bureau of Land Management
BMCM	Bulk Material Control Measures
BMP	best management practice
BMP	best management practice
BNSF	Burlington Northern Santa Fe
BP	years before present
BPS	Best Performance Standard
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CadnaA	Computer Aided Noise Abatement
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal NAGPRA	California Native American Graves Protection and Repatriation Act
CalEEMod	California Emissions Estimator Model
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalGEM	California Geologic Energy Management
CALGreen	California Green Building Standards Code
CalOSHA	California OSHA
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation

CAO	County Administrative Office
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act of 1988
CCAP	Climate Change Action Plan
CCR	California Code of Regulations
CDC	Centers for Disease Control and Prevention
CDFW	California Department of Fish and Wildlife
CDNPA	California Desert Native Plants Act
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
cf	cubic foot
CFC	California Fire Code
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CHL	California Historical Landmark
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CI	*Coccidioides immitis*
CMA	Congestion Management Agency
CMP	congestion management program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide

CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COC	California Department of Conservation
COG	Council of Governments
County	Kern County
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CVC	California Vehicle Code
cy	cubic yard
dB	decibel
dBA	"A-weighted" decibel
DC	direct current
DC	direct current
DOC	California Department of Conservation
DPM	diesel particulate matter
DPR	Department of Pesticide Regulation
DRECP	Desert Renewable Energy Conservation Plan
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
E	Estate
EAFB	Edwards Air Force Base
eFate	environmental fate
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report
EKAPCD	Eastern Kern Air Pollution Control District
EMF	electromagnetic field
EMFAC2017	Emissions Factor 2017
EMS	Emergency Medical Services Division

EMT	Emergency Medical Technician
EPS	Emissions Performance Standard
ESA	Environmental Site Assessment
ESS	energy storage system
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FHWA	U.S. Department of Transportation, Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping & Monitoring Program
FPPA	Farmland Protection Policy Act
FPS	Floodplain Secondary
FR	*Federal Register*
FRAP	Fire and Resource Assessment Program
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
FVGB	Fremont Valley Groundwater Basin
GBCB	Great Basin Concave Base
GBS	Great Basin Stemmed
gen tie	generation tie
GHG	greenhouse gas
GIS	geographic information system
GLO	General Land Office
GPA	General Plan Amendment
GPA	General Plan Amendment
GPS	Global Positioning System
gr/scf	grains per standard cubic foot of gas at standard conditions
GSP	Groundwater Sustainability Plan
GWh	gigawatt-hour

GWP	Global Warming Potential
H_2S	hydrogen sulfide
HAP	hazardous air pollutant
HASP	Health and Safety Plan
HCP	Habitat Conservation Plan
Heritage	Heritage Environmental Consultants, LLC
HFC	hydrofluorocarbon
HMA	Hazard Mitigation Analysis
HRA	Health Risk Assessment
HSC	Health and Safety Code
HSWA	Hazardous and Solid Waste Act
HUC	Hyrdologic Unit Code
HVAC	heating ventilation and cooling
Hz	hertz
IBA	Important Bird Area
IEC	International Electrotechnical Commission
IFC	International Fire Code
in/sec	inch per second
IOU	investor-owned utility
IPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel for Climate Change
IRWMP	Integrated Regional Water Management Plan
IS/NOP	Initial Study/Notice of Preparation
ISDD	Intermediate Storm Design Discharge
ISO	International Organization for Standardization
ITP	Incidental Take Permit
IWMS	Integrated Wildfire Mitigation Strategy
Jacobs	Jacobs Engineering Group Inc.
KCFD	Kern County Fire Department
KCOG	Kern Council of Governments

KCSO	Kern County Sheriff's Office
KOP	Key Observation Point
KRVHF	Kern River Valley Heritage Foundation
kV	kilovolt
kWh	kilowatt-hour
L_{10}	noise level equaled or exceed 10 percent of the measured time interval
L_{50}	noise level equaled or exceed 50 percent of the measured time interval
L_{90}	noise level equaled or exceed 90 percent of the ti measured time interval
LACFD	Los Angeles County Fire Department
LCFS	Low Carbon Fuel Standard
L_{dn} or DNL	Day-Night Average Sound Level
L_{eq}	equivalent sound level
LEV	Low-Emissions Vehicle
L_{max}	maximum instantaneous noise level
L_{min}	minimum instantaneous noise level
LOS	Level of Service
LRA	Local Responsibility Area
LSFT	large-scale fire testing
m	meter
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin
MEIR	maximally exposed individual resident
MEIW	maximally exposed individual worker
mg/L	milligram per liter
MHV	Mojave Air & Space Port/Rutan Field
ML	monitoring location
MMcfd	million cubic feet per day
MMT	million metric tons
MND	Mitigated Negative Declaration
mph	mile per hour

MPO	metropolitan planning organization
MPUD	Mojave Public Utilities District
MRZ	Mineral Resource Zone
MT	metric ton
MV	medium voltage
MW	megawatt
MWh	megawatt-hour
MY	model year
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NEHRP	National Earthquake Hazards Reduction Program
NERC	North American Electric Reliability Corporation
NESC	National Electric Safety Code
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NFPA	Nationa Fire Protection Association
NFPA	National Fire Protection Association
NHMLAC	Natural History Museum of Los Angeles County
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health
NO	nitric oxide
NO_2	nitrogen dioxide
NOC	Notice of Completion
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NR	Natural Resources
NRCS	Natural Resources Conservation Service

NRHP	National Register of Historic Places
NSA	noise-sensitive area
NUA	Northern Uto Aztecan
NWCG	National Wildfire Coordinating Group
NWI	National Wetlands Inventory
O&M	operations and maintenance
O_3	ozone
OAP	Ozone Attainment Plan
OEHHA	Office of Environmental Health Hazard Assessment
OEIS	California Office of Energy Infrastructure Safety
OES	California Office of Emergency Services
OHV	Off-Highway Vehicle
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
P.L.	Public Law
Pb	lead
PCB	polychlorinated biphenyl
PCE	passenger car equivalent
PCT	Pacific Crest National Scenic Trail
PDSI	Palmer Drought Severity Index
PE	Petroleum Extraction
PFC	perfluorocarbon
PHEV	plug-in hybrid electric vehicle
PHI	point of historical interest
PI	plasticity index
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PMI	point of maximum impact
Porter-Cologne Act	Porter-Cologne Water Quality Control Act

Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppb	part per billion
ppm	part per million
PPV	peak particle velocity
PRC	Public Resources Code
project	Galaxy Solar PV & Storage Project
project proponent	Galaxy Solar Storage, LLC
PSD	Prevention of Significant Deterioration
PSPS	Public Safety Power Shutoff
PV	photovoltaic
PVC	polyvinyl chloride
RACM	Reasonably Available Control Measures
RCRA	Resource Conservation and Recovery Act
Registry	California Climate Action Registry
RHNA	Regional Housing Needs Allocation
RHNA	Regional Housing Needs Allocation
RMS	root mean square
ROG	reactive organic gas
ROW	right-of-way
RPS	Renewable Portfolio Standard
RSLF	Recycling and Sanitary Landfill
RTP	Regional Transportation Program
RWMG	Regional Water Management Group
RWQCB	Regional Water Quality Control Board
S	Statewide
SAFE	Safer Affordable Fuel-Efficient
SAR	Second Assessment Report
SC	Scenic Corridor
SCADA	supervisory control and data acquisition
SCAQMD	South Coast Air Quality Management District

SCE	Southern California Edison
SCE	Southern California Edison
SCIC	Supplemental Cumulative Impact Charge
SCS	Sustainable Communities Strategy
SDC	seismic design category
SF_6	sulfur hexafluoride
SGHAT	Solar Glare Hazard Analysis Tool
SGMA	Sustainable Groundwater Management Act
SIL	Significant Impact Level
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLAMS	State and Local Air Monitoring Stations
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act of 1975
SO_2	sulfur dioxide
SO_4	sulfate
SO_4^{2-}	sulfates
SoCalGas	Southern California Gas Company
SPCC	spill prevention, control, and countermeasure
SR	State Route
SRA	State Responsibility Area
SRA	State Responsibility Area
SRI	Statistical Research Inc.
SRS	State Responsibility Area
SSJVIC	Southern San Joaquin Valley Information Center
Stat.	Statute
STIP	State Transportation Improvement Program
SVP	Society of Vertebrate Paleontology
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan

SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAZ	traffic analysis zone
TCM	transportation control measure
TDS	total dissolved solids
Tetra Tech	Tetra Tech, Inc.
TMDL	total maximum daily load
TNRE	True North Renewable Energy
tpy	ton per year
U.S.C.	United States Code
UL	Underwriters Laboratories
Unified Program	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UV-B	ultraviolet
UWMP	Urban Water Management Plan
VdB	vibration decibel
VMT	vehicle miles traveled
VOC	volatile organic compound
VTPM	vesting tentative parcel map
W	watt
WDR	Waste Discharge Requirement
WEMO Plan	West Mojave Plan
Wh	watt-hour
WJT	Western Joshua tree

WJTCA	Western Joshue Tree Conservation Act
WMP	Wildfire Mitigation Plan
WOTUS	waters of the United States
ZCC	Zone Classification Change
ZEV	Zero-Emissions Vehicle

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Chapter 7
Response to Comments

7.1 Introduction

Purpose

As defined by Section 15050 of the California Environmental Quality Act (CEQA) Guidelines, the Kern County Planning and Natural Resources Department is serving as "Lead Agency" for the preparation of the Environmental Impact Report (EIR) for the Galaxy Solar PV & Storage Project (project or proposed project). The Final EIR presents the environmental information and analyses that have been prepared for the project, including comments received addressing the adequacy of the Draft EIR, and responses to those comments. In addition to the responses to comments, clarifications, corrections, or minor revisions have been made to the Draft EIR. The Final EIR, which includes the responses to comments, the Draft EIR, and the Mitigation, Monitoring, and Reporting Program, will be used by the Planning Commission and the Board of Supervisors in the decision-making process for the proposed project.

Environmental Review Process

A Notice of Preparation (NOP)/Initial Study (IS) (SCH No. 2025081409) was circulated for a 30-day public review period beginning on September 4, 2025, and ending on October 6, 2025. Sixteen (16) individual written comment letters were received on the NOP during this review. All public comments received relevant to CEQA-related issues were considered by the County in preparing the Draft EIR.

The Draft EIR for the proposed project was circulated for a 45-day public review period beginning on April 30, 2026, through June 15, 2026. A total of ten (10) comment letters were received on the Draft EIR during this period and one (1) letter was received after the close of the comment period.

Section 15088 of the CEQA *Guidelines* requires that the lead agency evaluate comments on environmental issues received from persons and agencies that reviewed the Draft EIR and prepare a written response addressing the comments received. The response to comments is contained in this document—Volume 6, Chapter 7 of the Draft EIR. Volumes 1, 2, 3, 4, 5, and 6 together constitute the Final EIR.

7.2 Revisions to the Draft EIR

The revisions that follow were made to the text of the Draft EIR. Amended text is identified by page number. Additions to the Draft EIR text are shown with <u>underlined</u> text, and text removed from the Draft EIR is shown with ~~strikethrough~~. Revisions to a Draft EIR are required if clarifications or responses to comments cannot be made without alterations to the document. The revisions, as outlined below, fall within the scope of the original project analysis included in the Draft EIR and do not result in an increase to any identified significant impacts or produce any new significant impacts. No new significant environmental impact would result from the changes or from a new mitigation measure proposed to be implemented.

Therefore, no significant revisions have been made that would require recirculation of the Draft EIR pursuant to CEQA *Guidelines* Section 15088.5 (Recirculation of an EIR Prior to Certification).

After circulation of the Draft EIR, the following minor project modifications were made to the project, within the Project Infill Area:

- Placement of additional photovoltaic (PV) solar panels on 22 parcels added to the project site (approximately 119 acres).
- Placement of infrastructure corridors on 23 off-site parcels (approximately 142 acres). No PV solar facilities would be placed within the infrastructure corridors. Rather, development within the infrastructure corridors would be limited to linear infrastructure, such that ground disturbing activities would not occur over the full extent of the corridors. Ground disturbing activities would be limited to placing transmission poles, trenching, and limited grading for access roads. Nine parcels within the infrastructure corridors (APNs 428-030-32, 428-174-16, 428-174-17, 428-174-18, 428-174-29, 428-174-33, 428-201-16, 428-202-07, and 428-202-41) would comprise a water line located within an existing medium-voltage corridor that was previously evaluated as part of the Sanborn Solar Project and Enterprise Solar Storage Project EIRs. While the proposed water line was not included in the original project description, the Project Infill Area would include an above- and/or below-ground water line connection to an existing well at the Sanborn Solar Project site. All affected parcels are located within the Mojave Specific Plan area and are zoned A-1, therefore, no rezoning would be required.

The minor project modifications would require the following entitlement approvals and have been included in the proposal with no new case numbers necessary:

- Zone Classification Changes (ZCC) for certain parcels within the Project Infill Area as described in **Table 7-1**, *Project Infill Area Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages,* to change the existing base zoning district (excluding their combining zone classification) to the A (Exclusive Agriculture) District (when not already zoned A). Solar energy electrical generators are authorized within the A District with approval of a Conditional Use Permit (CUP) pursuant to Section 19.12.030.G. of the Kern County Zoning Ordinance.
- Inclusion of the additional solar PV parcels in two of the requested Conditional Use Permits for the project, additional General Plan Amendment to the Circulation Element of the Kern County General Plan, and additional Zone Variances (detailed in **Table 7-1**, *Project Infill Area Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages*).

The project, including the minor project modifications, consists of a revised project design of an approximately 600-megawatt (MW) PV solar facility, which may include up to 4 gigawatt-hours (GWh) of energy storage capacity, on an approximately 3,519-acre project site. The project, as assessed in the Draft EIR, consisted of an approximately 600-MW PV solar facility, which may include up to 4 GWh of energy storage capacity, on an approximately 3,400-acre project site. The project, including the minor project modifications, is depicted on Figure 2 in **Appendix N**, *Revised Project Design—Additional Environmental Information*.

TABLE 7-1. PROJECT INFILL AREA ASSESSOR PARCEL NUMBERS, EXISTING AND PROPOSED LAND USE ZONINGS, AND ACREAGES

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation[1]	Proposed General Plan Designation[1]	Existing Zoning[2]	Proposed Zoning[2]	Zone Variance Requested
Additional Solar PV Panel Parcels										
1	195	235-212-18	10.00	10.00	KCGP	8.5	8.5	A-1	A	Yes
2	195	235-212-19	10.00	10.00	KCGP	8.5	8.5	A-1	A	Yes
3	195	235-212-20	9.32	9.32	KCGP	8.5	8.5	A-1	A	Yes
4	195	235-212-21	9.32	9.32	KCGP	8.5	8.5	A-1	A	Yes
5	212	244-431-07	20.00	20.00	KCGP	8.5;2.5	8.5;2.5	A-1	A	No
6	212	244-431-12	20.00	20.00	KCGP	8.5	8.5	A-1	A	No
7	212	244-451-07	10.00	10.00	KCGP	8.5	8.5	A-1	A	Yes
8	212	244-451-10	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
9	212	244-451-12	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
10	212	244-451-25	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
11	212	244-451-26	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
12	212	244-452-04	5.00	5.00	KCGP	8.5	8.5	A-1	A	Yes
13	212	244-452-09	1.25	1.25	KCGP	8.5	8.5	A-1	A	Yes
14	212	244-452-10	1.25	1.25	KCGP	8.5;2.5	8.5;2.5	A-1	A	Yes
15	212	244-452-11	1.25	1.25	KCGP	8.5; 2.5	8.5; 2.5	A-1	A	Yes
16	212	244-452-12	1.25	1.25	KCGP	8.5	8.5	A-1	A	Yes
17	212	244-452-13	1.25	1.25	KCGP	8.5	8.5	A-1	A	Yes
18	212	244-452-14	1.25	1.25	KCGP	8.5	8.5	A-1	A	Yes
19	212	244-452-15	1.25	1.25	KCGP	8.5; 2.5	8.5; 2.5	A-1	A	Yes
20	212	244-452-16	1.25	1.25	KCGP	8.5; 2.5	8.5; 2.5	A-1	A	Yes
21	212	244-452-27	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
22	212	244-452-28	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
Infrastructure Corridors										
23	212	244-451-01	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes
24	212	244-451-02	7.50	0.00	KCGP	8.5; 2.4	8.5; 2.4	A-1	A	Yes
25	212	244-451-03	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation[1]	Proposed General Plan Designation[1]	Existing Zoning[2]	Proposed Zoning[2]	Zone Variance Requested
26	212	244-451-04	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes
27	212	244-451-05	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes
28	212	244-451-06	2.50	0.00	KCGP	8.5; 2.4	8.5; 2.4	A-1	A	Yes
29	212	244-452-01	5.00	0.00	KCGP	8.5	8.5	A-1	A	Yes
30	212	244-452-02	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes
31	212	244-452-17	1.25	0.00	KCGP	8.5;2.5	8.5;2.5	A-1	A	Yes
32	212	244-452-18	1.25	0.00	KCGP	8.5	8.5	A-1	A	Yes
33	212	244-452-19	1.25	0.00	KCGP	8.5	8.5	A-1	A	Yes
34	212	244-452-20	1.25	0.00	KCGP	8.5	8.5	A-1	A	Yes
35	212	244-452-21	1.25	0.00	KCGP	8.5	8.5	A-1	A	Yes
36	212	244-452-25	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes
37	196	428-030-32	18.76	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
38	196	428-174-16	7.50	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
39	196	428-174-17	2.5	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
40	196	428-174-18	5.00	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
41	196	428-174-29	5.00	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
42	196	428-174-33	20.00	0.00	Mojave Specific Plan	4.1	4.1	A	A	No
43	196	428-201-16	33.00	0.00	Mojave Specific Plan	4.1; 2.5	4.1; 2.5	A-1 FPS	A-1 FPS	No
44	196	428-202-07	5.00	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
45	196	428-202-41	9.24	0.00	Mojave Specific Plan	4.1	4.1	A-1 FPS	A-1 FPS	No

Notes:
APN = Assessor Parcel Number; CUP = Conditional Use Permit; KCGP = Kern County General Plan
[1] Kern County General Plan (KCGP) and Specific Plan (SP) Map Code Designation:
2.4 (Steep Slope)
2.5 (Flood Hazard)
4.1 (Accepted County Plan Areas)
8.5 (Resource Management, Min. 20 Acre)
[2] Kern County Zoning District:
A (Exclusive Agriculture); A-1 (Limited Agriculture); and FPS (Flood Plain Secondary)

Project Infill Area Environmental Setting

The minor project modifications add approximately 119 acres of land for PV panels to the project site, as well as approximately 142 acres of infrastructure corridors for linear infrastructure such as subsurface and/or overhead electrical transmission systems, water lines, water storage, and access roads (collectively, the Project Infill Area). The Project Infill Area is generally undeveloped land within and adjacent to the project area analyzed in the Draft EIR and shares similar characteristics. The closest sensitive receptor to the Project Infill Area, on land not owned by the project proponent, is a residence located approximately 1 mile to the southwest at APN 429-152-21, in Section 12, Township 10 North, Range 12 West. The Project Infill Area Environmental Setting is described further in **Appendix N**, *Revised Project Design—Additional Environmental Information*.

Project Access

The minor project modifications would not change project access from what was evaluated in the Draft EIR; primary site access is from the mapped alignment of 45th Street via State Route 58 with additional access from the current alignment of Silver Queen Road via United Street. Current legal access for all existing residences would be preserved and would not be hindered by the project. It should be noted, as a result of the infill area, three (3) adjacent parcels (APNs 244-452-22, 244-452-23 and 244-452-24) are illustrated as "Not A Part" on the proposed modified site plan. Because the project proponent does not retain control over APN 244-452-24, access to this property for the benefit of the property owner will be preserved. Furthermore, the project will provide additional public access to parcels within the project vicinity that are not controlled by the project proponent through the Vesting Tentative Parcel Map process. The project will also provide alternative access easements for parcels requiring access through the recordation of such easements.

Construction

There are no changes to the project's proposed construction schedule resulting from the minor project modifications, which is expected to last approximately 26 months and would proceed following receipt of all permits and agency approvals. The construction activities for the project are categorized into three main phases:

- Site Preparation;
- System Installation; and
- Testing, Commissioning, and Cleanup.

Details for construction phases and their respective durations and required equipment are unchanged from those presented in **Table 3-4**, *Solar PV Construction Activity, Duration, and Equipment* in **Chapter 3**, *Project Description*, of the Draft EIR. Construction workforce, hours and schedule are unchanged from those provided in the Draft EIR.

Project construction water usage is anticipated to be approximately 451 acre-feet during the 26-month construction period and would be sourced from onsite or offsite water wells supplemented by water purchased from local water purveyors, unchanged from the analysis in the Draft EIR. Construction water demand and sources would be unchanged from those provided in the Draft EIR. Hazardous materials use

and disposal and solid waste generation during construction would also be unchanged from those provided in the Draft EIR.

Operation

There are no changes to the proposed operation of the project. As presented in the Draft EIR, it is anticipated that approximately six (6) permanent, full-time employees would be needed to maintain the facility included in the project. The annual operational water usage is expected to be approximately 6 acre-feet of water. Hazardous materials use and disposal and solid waste generation during operation would also be unchanged from those provided in the Draft EIR.

Decommissioning

There are no changes to the proposed decommissioning of the project. As presented in the Draft EIR, the project has an anticipated operational life of up to 35 years. All decommissioning and reclamation activities would be outlined in a step-by-step Decommissioning Plan and would adhere to the requirements of the appropriate governing authorities as well as all applicable local, state, and federal requirements and best management practices. Decommissioning activities would be the same as provided in the Draft EIR.

Additional Environmental Information

The project, including the minor project modifications, would result in similar environmental impacts to all resource areas as the project evaluated in the Draft EIR, as outlined by resource area below. Also see ***Appendix N: Revised Project Design – Additional Environmental Information***.

7.2.1.1 Aesthetics

The revised project would have similar aesthetic impacts as evaluated in the Draft EIR. Due to the unchanged workforce, construction equipment, and anticipated vehicle trips, potential construction impacts would be similar to those identified in the Draft EIR. The Project Infill Area is primarily surrounded by or adjacent to the Project area analyzed in the Draft EIR and is located the same distance from sensitive receptors analyzed in the Draft EIR. There are no local areas that are designated as scenic vistas or Officially Designated State Scenic Highways within the vicinity of the Project Infill Area. Further, the minor project modifications would be consistent with scale and appearance of the facilities and improvements evaluated in the Draft EIR. Views from all Key Observation Points described in the Draft EIR would be unchanged for the Revised Project. All mitigation measures from the Draft EIR related to aesthetics would be implemented within the Project Infill Area. **Mitigation Measures MM 4.1-1** through **MM 4.1-5** would reduce visual impacts associated with the revised project by limiting vegetation removal, planting native vegetation, providing privacy fencing, reducing visibility of Project facilities, and minimizing debris and trash. Native vegetation would be left in place on the Project site where feasible, allowing for a natural screening of Project components. Additionally, per **Mitigation Measure MM 4.1-6**, any nighttime construction would use lighting designed to provide the minimum illumination needed, thereby minimizing adverse impacts on any nearby residents. Finally, the revised project would implement **Mitigation Measure MM 4.1-7**, which requires the Project proponent to demonstrate the solar arrays and hardware are designed to minimize glare. With the exception of impacts to visual character, impacts to aesthetics would remain less than significant, consistent with the findings in the Draft EIR. Also consistent with findings in the Draft EIR, impacts to visual character would remain significant and unavoidable. Thus, the revised project would

not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to aesthetics. Therefore, all impact conclusions in the Draft EIR related to aesthetics impacts would be the same for the revised project.

7.2.1.2 Agriculture and Forestry Resources

The revised project would have similar impacts to agriculture and forestry resources as the project. Same as the Project area evaluated in the Draft EIR, the Project Infill Area is not designated by the California Department of Conservation as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland; the Department of Conservation designates the Project Infill Area as Nonagricultural or Natural Vegetation. Additionally, same as the Project area evaluated in the Draft EIR, none of the Project Infill Area parcels are subject to a Williamson Act Land Use contract or occur within an Agriculture Preserve boundary. The Project Infill Area is not located on land zoned as forest land, timberland, or timberland production. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to agriculture and forestry resources. Therefore, all impact conclusions in the Draft EIR related to agriculture and forestry resources impacts would be the same for the revised project.

7.2.1.3 Air Quality

The revised project would have similar impacts to air quality as the project. Due to the unchanged workforce, construction equipment, and anticipated vehicle trips, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including anticipated emissions from off-road equipment exhaust and on-road vehicle trip generation for employee trips; thus, potential operational impacts would be similar to those identified in the Draft EIR. The Project Infill Area is primarily surrounded by or adjacent to the Project area analyzed in the Draft EIR and is located the same distance from sensitive receptors analyzed in the Draft EIR. All mitigation measures from the Draft EIR related to air quality would be implemented within the Project Infill Area. **Mitigation Measure MM 4.3-1** would ensure that the revised project would continuously comply with applicable rules and regulations set forth by the Eastern Kern Air Pollution Control District. The revised project also would implement **Mitigation Measures MM 4.3-2** and **MM 4.3-3**, such that nitrogen oxides, particulate matter with a diameter less than 10 microns (or PM_{10}), and particulate matter with a diameter less than 2.5 microns (or $PM_{2.5}$) emissions during Project construction would be below the Eastern Kern Air Pollution Control District significance thresholds. Implementation of **Mitigation Measures MM 4.3-3** through **MM 4.3-5** would ensure construction and decommissioning activities would employ emissions reduction strategies as well as notify surrounding property owners of onsite activities and the presence of an onsite construction coordinator. **Mitigation Measures MM 4.3-6** and **MM 4.3-7** would address potential Valley Fever risk by implementing fugitive dust control measures, establishing a public complaint protocol for excessive dust generation, and requiring Valley Fever-related training for construction workers. Finally, **Mitigation Measure MM 4.3-8** would require the implementation of a COVID-19 Health and Safety Plan to address lingering COVID-19 symptoms exacerbated by increased $PM_{2.5}$ emissions resulting from the Revised Project. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to air quality, and the mitigation measures in the EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to air quality impacts would be the same for the revised project.

7.2.1.4 Biological Resources

The revised project would have similar impacts to biological resources as the project. Biological surveys have been conducted for the entirety of the Project Infill Area. Pedestrian biological surveys were completed in spring 2017 and spring 2018 (Dudek 2019a), and in spring 2023, spring 2024, and spring and fall 2025 (Tetra Tech 2025). Additionally, protocol-level surveys for desert tortoise (Gopherus agassizii) were conducted by Tetra Tech in the spring of 2026.

Based on these surveys and additional desktop analysis, vegetation within the Project Infill Area is substantially similar to that analyzed within the Draft EIR, consisting mostly of allscale scrub and creosote bush – white bursage scrub, as well as disturbed and developed areas. Emergent Western Joshua trees (WJT; Yucca brevifolia) are scattered throughout the Project Infill Area. WJT is a state candidate species under the California Endangered Species Act and is protected under the California Desert Native Plant Act. No Joshua tree woodlands occur within the Project Infill Area.

Based on pedestrian surveys and additional desktop analysis (literature review and database search) and consistent with the analysis in the Draft EIR, the Project Infill Area contains habitat that supports insects, rodents, and small birds that provide a prey base for raptors and terrestrial wildlife. The Project Infill Area supports a similar diversity of special-status species as those analyzed in the Draft EIR.

Due to the similarity of vegetation and habitats occurring within the Project Infill Area and the Project site analyzed in the Draft EIR, potential impacts to plants, wildlife, and potentially jurisdictional waters within the Project Infill Area would be similar to those impacts identified in the Draft EIR. With the exception of WJT, impacts to biological resources would remain less than significant with implementation of **Mitigation Measures MM 4.1-1**, **MM 4.1-3**, **MM 4.1-6**, **MM 4.1-7**, **MM 4.3-3**, **MM 4.4-1** through **MM 4.4-23**, **MM 4.9-2**, **MM 4.10-1**, **MM 4.10-2**, **MM 4.13-1**, and **MM 4.14-1**, consistent with the findings in the Draft EIR. Also consistent with findings in the Draft EIR, impacts to WJT would remain significant and unavoidable. No Joshua tree woodlands occur within the Project Infill Area.

No new impacts to biological resources for the Project Infill Area were identified and no new mitigation measures for biological resources are required. All mitigation measures from the Draft EIR related to biological resources would be implemented within the Project Infill Area. Accordingly, the revised project would not result in any new significant impacts or substantial increases in the severity of previously identified impacts related to biological resources, and all impact conclusions related to biological resources in the Draft EIR would remain the same.

7.2.1.5 Cultural Resources and Tribal Cultural Resources

The revised project would have similar impacts to cultural and tribal cultural resources as the project. The Project Infill Area was previously surveyed for cultural resources in 2017 and 2018 (Dudek 2019b), 2023 and 2024 (SRI 2025), and 2026 (Tetra Tech 2026). No resources in the Project Infill Area were found to be California Register of Historic Resources eligible. On November 9, 2022, and July 31, 2025, the NAHC sacred land file results indicated no sacred lands are within or near the Project site. The County's previous consultation efforts with interested Native American groups did not result in the identification of any tribal cultural resources in the Project area. Based on the results of these cultural resource technical studies, potential impacts to cultural and tribal cultural resources resulting from the Project Infill Area would be similar to those identified in the Draft EIR, and the mitigation measures identified for cultural resources are sufficient to address those impacts.

Implementation of **Mitigation Measure MM 4.5-1** requires cultural resources sensitivity training for construction workers. **Mitigation Measure MM 4.5-2** requires a Cultural Resources Treatment Plan. **Mitigation Measure MM 4.5-3** requires appropriate treatment of uncovered archaeological resources, including those that qualify as historical resources. **Mitigation Measure MM 4.5-4** requires archaeological and Native American monitoring to ensure appropriate treatment of unearthed archaeological resources during construction. Implementation of these mitigation measures would reduce potential impacts to historical resources to less than significant. **Mitigation Measure MM 4.5-5** would ensure that appropriate laws and protocols are followed if human remains are uncovered and ensure that impacts are not significant.

With implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5,** the revised project would not result in significant impacts to cultural or tribal cultural resources. No new cultural resources or tribal cultural resources impacts for the Project Infill Area were identified, and no new mitigation measures for cultural resources or tribal cultural resources are required to reduce impacts to less than significant levels. All mitigation measures from the Draft EIR related to cultural and tribal cultural resources would be implemented within the Project Infill Area. Accordingly, the revised project would not result in any new significant impacts related to cultural resources or tribal cultural resources, and all impact conclusions in the Draft EIR would remain the same.

7.2.1.6 Energy

The revised project would have similar impacts to energy as the project. Due to the unchanged workforce, construction equipment, and anticipated vehicle trips, potential construction impacts for the revised project would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including electricity and diesel fuel use and employee trips; thus, potential operational impacts would be similar to those identified in the Draft EIR. All mitigation measures from the Draft EIR related to energy would be implemented within the Project Infill Area. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to energy, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to energy impacts would be the same for the revised project.

7.2.1.7 Geology and Soils

The revised project would have similar impacts to geology and soils as the project. The Project Infill Area is subject to the same geological conditions as the rest of the Project, including the associated potential for fault rupture, ground shaking, landslides, liquefaction and lateral spreading, soil erosion, subsidence, soil collapse, and expansive soils. The Project Infill Area also is predominantly underlain by Holocene or recent alluvium (Q). All mitigation measures from the Draft EIR related to geology and soils would be implemented within the Project Infill Area.

Mitigation Measure MM 4.7-1 requires that a site-specific geotechnical study be conducted to evaluate soil conditions and geologic hazards on the Project site. **Mitigation Measure MM 4.7-2** requires that a California registered and licensed geotechnical engineer be hired by the Project proponent to design Project facilities to withstand probable seismically induced ground shaking. All grading and construction onsite would adhere to the specifications, procedures, and site conditions contained in the final design plans, which would be fully compliant with the seismic recommendations provided by the California registered and licensed geotechnical engineer in accordance with California and Kern County Building Code

requirements. Structures constructed as part of the revised project would be required by state law to be constructed in accordance with all applicable International Building Code and California Building Code earthquake construction standards, including those relating to soil characteristics. Furthermore, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented per the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit Program. The SWPPP would detail that existing vegetation and topography are to be preserved to the maximum extent possible. The SWPPP would also specify various types of best management practices (BMP), including erosion control BMPs, to prevent soil from moving offsite; all temporary erosion control measures required by the Kern County Grading Code (Chapter 17.28.140) would be incorporated into the SWPPP (**Mitigation Measure MM 4.10-1**). If required, the revised project's septic system would be constructed to comply with applicable requirements of the Kern County Environmental Health Services Division, and **Mitigation Measure MM 4.7-3** would require the Project operator to obtain all required permits and approvals from the Kern County Environmental Health Services Division and to implement all required conditions regarding the design and siting of the septic system. Finally, **Mitigation Measures MM 4.7-4** through **MM 4.7-7** would require Paleontological Resources Awareness Training for construction workers, use of a qualified paleontological monitor during construction activities, and appropriate treatment of inadvertently uncovered paleontological resources.

Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to geology and soils, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to geology and soils would be the same for the revised project.

7.2.1.8 Greenhouse Gas Emissions

The revised project would have similar impacts to greenhouse gases (GHG) emissions as the project. Due to the unchanged workforce, construction equipment, and anticipated vehicle trips, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including anticipated emissions from off-road equipment exhaust and on-road vehicle trip generation for employee trips; thus, potential operational impacts would be similar to those identified in the Draft EIR. Once operational, the revised project would generate renewable energy with minimal associated GHG emissions and would result in displaced GHG emissions due to the gradual switch from non-renewable GHG-generating energy to renewable energy, estimated to be approximately 445,589 metric tons (MT) of carbon dioxide equivalent GHGs annually that would otherwise be emitted to produce an equivalent amount of energy from fossil fuel sources. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to GHGs. Therefore, all impact conclusions in the Draft EIR related to GHG impacts would be the same for the revised project.

7.2.1.9 Hazards and Hazardous Materials

The revised project would have similar impacts to hazards and hazardous materials as the project. According to a review of the Department of Toxic Substances Control's EnviroStor database, there are no hazardous release sites located within the Project Infill Area (DTSC, 2025). Similarly, the State Water Resources Control Board GeoTracker database also showed no listed release sites within the Project Infill Area (SWRCB, 2025). All other environmental conditions regarding hazardous substances remain unchanged from those described in the Draft EIR. The Project Infill Area is not located within a known oil

production field, nor does the Project Infill Area have any known active or abandoned oil wells The Project Infill Area is not located within the Airport Influence Area of the Mojave Air & Space Port. According to the California Department of Forestry and Fire Protection (CAL FIRE) Kern County Fire Hazard Severity Zone (FHSZ) Maps for Local Responsibility Areas (LRA) and State Responsible Areas (SRA), the Project Infill Area is classified as LRA Moderate. All mitigation measures from the Draft EIR related to hazards and hazardous materials would be implemented within the Project Infill Area.

Mitigation Measure MM 4.9-1 requires the preparation of a Hazardous Materials Business Plan that would describe proper handling, storage, transport, and disposal techniques and methods to be used to avoid spills and minimize potential impacts in the event of a spill. **Mitigation Measure MM 4.10-1** would require the revised project to implement applicable BMPs included in an NPDES-mandated SWPPP during construction to minimize the potential for incidental spills. Relevant BMPs would include designated fueling and maintenance areas that are supplied with temporary spill containment equipment, such as absorbent booms and pads, and hazardous waste disposal containers. **Mitigation Measure MM 4.9-2** would reduce potential impacts related to use of herbicides to a less-than-significant level. **Mitigation Measure MM 4.9-3** would require the revised project to comply with the County's regulations, applicable Federal Aviation Administration regulations, and military review requirements to ensure that there is no conflict with airport operations and no safety hazards are presented. **Mitigation Measure MM 4.15-1** would require the preparation of a Construction Traffic Control Plan that considers access for emergency vehicles to the revised project site. Additionally, as required by **Mitigation Measure MM 4.14-1**, the Project proponent would develop and implement a Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the current California Fire Code and Kern County Fire Code.

Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to hazards and hazardous materials, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to hazards and hazardous materials would be the same for the revised project.

7.2.1.10 Hydrology and Water Quality

The revised project would have similar impacts to hydrology and water quality as the project. As shown on **Figure 7**, *Project Infill Area Floodplain Map* in **Appendix N**, *Revised Project Design—Additional Environmental Information*, a Federal Emergency Management Agency (FEMA)-designated flood zone, Flood Zone "A," spans a portion of the Project Infill Area, indicating that this area could flood during a 100-year flood event. Project facilities located within a FEMA-designated flood zone would be designed to meet County requirements. All portions of the Project Infill Area located outside of Flood Zone "A" are located within FEMA-designated Flood Zone "X," which indicates areas of minimal flood hazard. Due to the unchanged workforce, construction equipment, and water demand, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including proposed operations and maintenance (O&M) activities and water demand; thus, potential operational impacts would be similar to those identified in the Draft EIR. Further, all mitigation measures from the Draft EIR related to hydrology and water quality would be implemented within the Project Infill Area.

Per **Mitigation Measure MM 4.10-1**, the SWPPP would include BMPs designed to prevent the occurrence of soil erosion and discharge of other construction-related pollutants that could contaminate water quality,

and would be applicable to all areas of the revised project, including the solar arrays, associated facilities, and the generation tie (gen-tie) line. **Mitigation Measure MM 4.10-2** would require the preparation of a Final Drainage Plan per the Kern County Development Standards and the Kern County Code of Building Regulations prior to issuance of a grading permit. **Mitigation Measure MM 4.9-1** would require the Project proponent to provide a Hazardous Materials Business Plan that would delineate hazardous material and hazardous waste storage areas; describe proper handling, storage, transport, and disposal techniques; describe methods to be used to avoid spills and minimize impacts in the event of a spill; describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction; and establish public and agency notification procedures for spills and other emergencies, including fires.

Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to hydrology and water quality, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to hydrology and water quality would be the same for the revised project.

7.2.1.11 Land Use and Planning

The revised project would have similar impacts to land use as the project. The Project Infill Area is generally undeveloped land within and adjacent to the Project area analyzed in the Project Draft EIR and would not divide an established community. The Kern County General Plan, Mojave Specific Plan, and the Kern County Zoning Ordinance establish land use policies and regulations that are applicable to the Project Infill Area. Due to the unchanged construction and operational characteristics of the revised project, the revised project would be consistent with the goals and policies of the Kern County General Plan and Mojave Specific Plan, as described in the Draft EIR. The Project proponent is requesting ZCCs for certain parcels within the Project Infill Area to change the existing base zoning district (excluding their combining zone classification) to the A (Exclusive Agriculture) District, similar to the rest of the Project site. Solar energy electrical generators are authorized within the A District with approval of a CUP pursuant to Section 19.12.030.G. of the Kern County Zoning Ordinance. With approval of the requested CUPs, the revised project would be consistent with applicable land use policies and regulations. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to land use, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to land use quality would be the same for the revised project.

7.2.1.12 Mineral Resources

The revised project would have similar impacts to mineral resources as the project. The Project Infill Area is not designated as a mineral recovery area by the Kern County General Plan, nor is it identified as a Mineral Resource Zone by the Department of Conservation's State Mining and Geology Board. There are no known oil, gas, or geothermal wells on the Project Infill Area. Additionally, there are no active mines or petroleum extraction facilities within or immediately adjacent to the Project Infill Area. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to mineral resources. Therefore, all impact conclusions in the Draft EIR related to mineral resources would be the same for the revised project.

7.2.1.13 Noise

The revised project would have similar impacts to noise as the project. Land uses surrounding the revised project site, including the Project Infill Area, primarily comprise renewable energy development, rural residential development, livestock grazing, military uses, and undeveloped lands. Due to the unchanged workforce, construction equipment, schedule, and anticipated vehicle trips, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged; thus, potential operational impacts would be similar to those identified in the Draft EIR. The Project Infill Area is primarily surrounded by or adjacent to the Project area analyzed in the Draft EIR and is located the same distance from sensitive receptors analyzed in the Draft EIR. Construction activities associated with the revised project would be in accordance with the hourly limitations specified in the Kern County Code of Ordinances, and operational noise impacts would be below Kern County noise standards and would result in less than significant impacts. All mitigation measures from the Draft EIR related to noise would be implemented within the Project Infill Area.

Although potential temporary construction noise impacts would be less than significant, to ensure compliance with Kern County's Noise Ordinance Code, required hourly limitations have been included in **Mitigation Measure MM 4.13-1**. Implementation of **Mitigation Measures MM 4.13-1** and **MM 4.13-2** would further reduce impacts during construction activities. **Mitigation Measure MM 4.13-3** would also be implemented to notify the public of the Project schedule and provide contact information, if needed. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to noise, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to noise would be the same for the revised project.

7.2.1.14 Public Services

The revised project would have similar impacts to public services as the project. Due to the unchanged workforce, construction equipment, and schedule, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged; thus, potential operational impacts would be similar to those identified in the Draft EIR. The revised project would not permanently increase the number of people on the Project site and would not increase the service demand for fire and police protection services and other facilities in Kern County. All mitigation measures from the Draft EIR related to public services would be implemented within the Project Infill Area.

As required by **Mitigation Measure MM 4.14-1**, the Project proponent would develop and implement a Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the current California Fire Code and Kern County Fire Code. The plan would be used throughout the construction period, as well as during operations, and would include emergency fire precautions for vehicles and equipment as well as implement fire rules and trainings so personnel are equipped to handle fire threats. Through implementation of **Mitigation Measure MM 4.14-2**, the revised project would pay all legally required property taxes or, if the Project qualifies, based on State Legislative action and the State Board of Equalization guidance, for any reduction in property taxes under a Solar Tax Exclusion or other specific property tax relief for solar or battery storage regardless of the name, then the Project shall pay a Cumulative Impact Charge. Through implementation of **Mitigation Measure MM 4.14-3**, if the ownership of the Project is sold to a city, county, or utility company that pays assessed taxes that are under $3,000 per megawatt, a Supplemental Cumulative Impact Charge would be paid for the difference annually up to $3,00

per megawatt. Through implementation of **Mitigation Measures MM 4.14-4** and **MM 4.14-5**, the Project proponent would work with the County to determine how the use of sales and use taxes from construction of the Project can be maximized, and provide a letter detailing efforts encouraging contractors to hire at least 50 percent of works from local Kern County communities. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to public services, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to public services would be the same for the revised project.

7.2.1.15 Transportation

The revised project would have similar impacts to transportation as the project. Due to the unchanged workforce, construction equipment, schedule, and anticipated vehicle trips, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including vehicle trips generated by employees; thus, potential operational impacts would be similar to those identified in the Draft EIR. Project access would be unchanged from what was evaluated in the Draft EIR; primary site access is from the mapped alignment of 45th Street via State Route 58 with additional access from the current alignment of Silver Queen Road via United Street. Current legal access for all existing residences would be preserved and would not be hindered by the revised project. Construction traffic would be temporary and would not result in long-term or permanent changes to local roadway conditions. Trips associated with routine O&M would be negligible in terms of traffic impact. There are no dedicated pedestrian or bicycle facilities in the immediate vicinity of the Project Infill Area or along the surrounding roadways. Proposed public access easement vacations and removal of road reservations for the revised project would not restrict the traveling public or neighboring property owners' access to areas outside the Project boundary. All mitigation measures from the Draft EIR related to transportation would be implemented within the Project Infill Area. **Mitigation Measures MM 4.15-1** and **4.15-2** require, among other things, the development of a construction traffic control plan, which would further reduce potential impacts to intersections resulting from temporary construction traffic. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to transportation, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to transportation would be the same for the revised project.

7.2.1.16 Utilities and Service Systems

The revised project would have similar impacts to utilities and service systems as the project. Due to the unchanged workforce, construction equipment, and water demand, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including proposed O&M activities and water demand; thus, potential operational impacts would be similar to those identified in the Draft EIR. All mitigation measures from the Draft EIR related to utilities and service systems would be implemented within the Project Infill Area. **Mitigation Measure MM 4.10-1** would require implementation of a SWPPP during construction, which would include BMPs related to stormwater drainage. Per **Mitigation Measure MM 4.10-2**, a Final Drainage Plan would be prepared in accordance with the Kern County Development Standards and Kern County Code of Building Regulations and would demonstrate the ability of any planned onsite storm drainage to adequately collect onsite stormwater flows in accordance with all applicable standards and BMPs. Additionally, per **Mitigation Measure MM 4.17-1**, a collection and recycling program would be implemented during decommissioning

to recycle Project components and minimize disposal of Project components in landfills. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to utilities, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to utilities and service systems would be the same for the revised project.

7.2.1.17 Wildfire

The revised project would have similar impacts to wildfire as the project. According to the CAL FIRE Kern County FHSZ Maps for LRAs and SRAs, the Project Infill Area is classified as LRA Moderate. Given this designation, the Project Infill Area is outside of areas identified by CAL FIRE as having substantial or high wildfire risk. The Project Infill Area is not located along an identified emergency evacuation route and is not identified in any adopted emergency evacuation plan. In compliance with applicable Fire Code and Building Code requirements, construction and maintenance/operations managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction would be maintained on site. Additionally, Project construction and maintenance/operations would comply with applicable existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. **Mitigation Measure MM 4.15-1** would require that all oversize vehicles used on public roadways during construction obtain required permits and obtain approval of a Construction Traffic Control Plan, as well as identify anticipated construction delivery times and vehicle travel routes in advance to minimize construction traffic during AM and PM peak hours. This would ensure that the potential for Project-related construction traffic to interfere with vehicular circulation or emergency access along local roadways would be minimized, including during any times of emergency evacuation. Additionally, Project operations would generate limited daily traffic traveling to and from the site for work and/or for intermittent maintenance purposes. The Project proponent/operator also would develop and implement a Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the 2022 California Fire Code and Kern County Fire Code plus procedures on vegetation clearing and maintenance for use during construction, operation and decommissioning, per implementation of **Mitigation Measure MM 4.14-1**. All revised project facilities would be installed in accordance with applicable County and state regulations related to fire protection. Thus, the revised project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to wildfire, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to wildfire would be the same for the revised project.

Chapter 1, Executive Summary, Table 1-7, Pages 1-54—1-63

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.4 Biological Resources			
Impact 4.4-1: The project would 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.	Potentially significant	Implementation of **Mitigation Measures MM 4.1-1, MM 4.1-3, MM 4.1-6**, **MM 4.1-7**, and **MM 4.3-3**, described above, and **MM 4.9-2, MM 4.13-1, and MM 4.14-1**, described below, would be required. **MM 4.4-1:** Prior to the issuance of grading or building permits, and prior to decommissioning, the project operator shall retain a Lead Biologist(s) who meets the qualifications of an Authorized Biologist as defined by the U.S. Fish and Wildlife Service (USFWS) to oversee compliance with protection measures for all listed and other special-status species that may be affected by the construction, operation, and decommissioning of the project. The contact information for the Lead Biologist(s) shall be provided in writing to the Planning and Natural Resources Department. The following measures pertain to the Lead Biologist(s): a. The Lead Biologist(s) or approved Biological Monitor shall be on the project site during construction and decommissioning of the project, and shall monitor all initial ground-disturbance activities and remain on-call throughout construction/decommissioning. Initial ground-disturbing construction activities include, but are not limited to, installation of perimeter fencing, clearing of vegetation, grading, site buildout, and decommissioning. b. The project operator shall retain a Lead Biologist(s) to oversee compliance with protection measures during operations. c. The Lead Biologist(s) or approved Biological Monitor(s) shall have the right to halt all activities that are in violation of the special-status species protection measures, as well as any regulatory permits from the USFWS and/or the California Department of Fish and Wildlife (CDFW), if applicable. Work shall proceed only after hazards to special-status species are removed and the species is no longer at risk. **MM 4.4-2:** Prior to the issuance of grading or building permits, or decommissioning of the site, the Lead Biologist(s) shall develop a Worker Environmental Awareness Training Program containing life history and identification information of special-status wildlife and plant species with potential to occur on site. The Worker Environmental Awareness Training Program shall	Significant and unavoidable (for Western Joshua tree) Less than significant (for all other affected species)

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		review responsibilities for all on-site personnel including trash control, checking under and around vehicles and heavy equipment before starting, scanning for wildlife resources, contacting the Lead Biologist(s) in the unanticipated instance of encountering special status wildlife species, and prohibition of pets and firearms. All on-site personnel shall be required to attend a worker environmental training. A sticker shall be placed on hard hats, indicating that the worker has completed the Worker Environmental Awareness Training. Copies of all prepared materials including, but not limited to, PowerPoint presentations, videos, information handouts and signed acknowledgement from each worker who has attended the required training shall be provided to the Kern County Planning and Natural Resources Department. **MM 4.4-3:** During project construction and decommissioning, the project proponent and/or contractor(s) shall implement the following general avoidance and protective measures: a. Immediately prior to conducting vegetation clearing or similar activities, the Lead Biologist(s) or their designee shall perform a pre-construction visual survey of the area to ensure that no special-status species are present. Daily reports of these inspections shall be retained by the Lead Biologist(s) and provided to the Kern County Planning and Natural Resources Department, and as required by resource agency permits issued to the project. b. All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid natural resources where possible. Construction-related activities outside of the impact zone shall be avoided. c. Access roads that are planned for use during construction activities shall not extend beyond the planned impact area; this area includes all previously disturbed lands and any location within the project fenceline not delineated for avoidance of sensitive biological resources. Where new access routes are required, the route shall be clearly marked prior to construction. d. The project proponent/operator shall minimize the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. These areas shall be demarcated and disturbance activities, vehicles, and equipment shall be confined to these areas. e. Any spoils shall be stockpiled in disturbed areas that lack native vegetation to the maximum extent practicable. Spoils that have been stockpiled and inactive for more than 24 hours shall be inspected by the Lead Biologist(s) or approved Biological Monitor(s)	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		for signs of special-status wildlife before moving or disturbing. f. To prevent inadvertent entrapment of desert kit foxes, American badgers, or other animals during construction, all excavated steep-walled holes or trenches more than two (2) feet deep shall be covered with plywood or similar materials at the close of each working day. If holes or trenches cannot be covered, one or more escape ramps constructed of earthen fill or wooden planks, no less than 12 inches wide and secured at the top, shall be placed a minimum of every 100 feet within the open trench. Covered and non-covered holes or trenches shall be thoroughly inspected for trapped animals by the Lead Biologist(s) or approved Biological Monitor(s) at the beginning and end of each working day. Immediately before such holes or trenches are filled, they shall again be thoroughly inspected by the Lead Biologist, approved Biological Monitor(s) or trained Staff approved by the Lead Biologist. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape or the Lead Biologist(s) may capture and relocate the animal (for non-listed species). If a listed species is found trapped, all work in the vicinity shall cease immediately. If the animal is apparently uninjured, then the Lead Biologist(s) shall directly supervise the provision of escape structures and/or trench modification to allow the trapped animal to escape safely. The animal shall be allowed to leave the work area and project site on its own and work shall not resume in the vicinity until the animal is out of harm's way. If the listed animal is injured, then the Lead Biologist(s) or approved Biological Monitor(s) shall immediately contact the USFWS and/or CDFW to identify an individual with the appropriate permit or authorization to handle listed species, who shall bring the animal to a pre-identified wildlife rehabilitation or veterinary facility for care. g. Burrowing owls, mammals, and nesting birds may use construction pipes, culverts, or similar structures for refuge or nesting. All towers that are of the monopole variety and all hollow vertical structures, such as solar mount poles, or fencing poles, shall be capped immediately after installation to prevent bird entrapment. Therefore, all construction pipes, culverts, or similar structures with a diameter of four (4) inches or more that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until the Lead Biologist(s) has been consulted and the animal has either moved from the structure on its own accord (for listed species) or until the animal has been captured and relocated (for	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		non-listed species) by the Lead Biologist(s) or approved Biological Monitor(s). If the animal is a listed species, then work shall immediately halt in the vicinity, and the animal shall be allowed to move from the structure and the work area of its own accord. The Lead Biologist(s) will direct work stoppages near the animal to allow it to freely move out of the pipe and away from the work area. Listed species shall not be handled or captured by anyone without the appropriate permit or authorization. h. No vehicle or equipment parked on the project site shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of listed wildlife species. If present, the animal shall be left to move on its own. i. Vehicular traffic to and from the project site shall use existing routes of travel. Cross country vehicle and equipment use outside designated work areas shall be prohibited. j. A speed limit of 15 miles per hour shall be enforced within the limits of the project site. If night work occurs on the project site, the speed limit shall be 10 miles per hour. This requirement shall be posted with signage noted throughout the site. k. Fueling of equipment shall take place within existing roads or disturbed areas. No refueling within or adjacent to drainages (within 150 feet) shall be permitted. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary. l. A long-term trash abatement program shall be established for construction, operations and maintenance, and decommissioning. Trash and food items shall be contained in closed containers to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs. m. Workers shall be prohibited from bringing pets and firearms to the project site and from feeding wildlife. n. Intentional and unpermitted killing or collection of any listed plant or wildlife species shall be prohibited. o. Herbicides that may be used as vegetation control measures in project areas shall be restricted. All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and state/federal legislation as well as additional project-related restrictions deemed necessary by the USFWS or CDFW. No rodenticides shall be used on the project site. p. To enable kit foxes and other wildlife (e.g., American badger) to pass through the project	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		site after construction, the permanent perimeter security fence around the solar field shall be a wildlife friendly design that meets the goals of allowing wildlife to move freely through the project site during operation. The fence around the solar field ~~leaving 4- to 7-inch openings or portals in the fence or the fence~~ shall be raised 4 to 7 inches above the ground leaving a gap between the fence mesh and the ground.~~, or as approved by USFWS or CDFW. In the latter case t~~ The bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that passes under the fence. Should this measure conflict with permits (ITP) issued by USFWS or CDFW, the measures in the ITP shall prevail. **MM 4.4-4:** During construction, operation and maintenance, and decommissioning, project work crews shall be directed to use industry accepted and standard construction best management practices (BMPs) consistent with the County zoning ordinances and with guidelines provided in the California Stormwater Quality Association's Construction Best Management Practice Handbook, where applicable, to avoid, minimize, and/or reduce potential construction-related impacts on biological resources. BMPs shall be monitored and repaired throughout the life of the project. The project proponent/operator and/or contractor(s) shall implement the general measures described below: a. BMPs shall be employed to prevent erosion in accordance with the project's approved Stormwater Pollution Prevention Plan. Detected erosion shall be remedied as described in the *Erosion Control Plan* of the Stormwater Pollution Prevention Plan. b. Material/spoils generated from project activities shall be located away from jurisdictional areas and environmentally sensitive areas that are not slated for impacts. c. Jurisdictional areas and environmentally sensitive areas shall be protected from storm water run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. d. Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and generally at least 50 feet from the top of bank of any jurisdictional areas and environmentally sensitive areas. e. Any spillage of material shall be stopped if it can be done safely. The contaminated area shall be cleaned, and any contaminated materials properly disposed of. For all spills, the project foreman or designated environmental representative shall be notified.	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		MM 4.4-5: Within 14 days prior to the commencement of ground-disturbing activities, the Lead Biologist(s) or their designee shall perform a pre-construction visual survey of the area to determine if rare plants and/or California Desert Native Plant Act species are present. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur no more than 14 days prior to ground disturbance in specific areas of the site. Copies of reports for these inspections shall be retained by the Lead Biologist(s) and provided to the Kern County Planning and Natural Resources Department to be kept on file and to CDFW upon request. If no species with a California Native Plant Society Rank of 2B or higher are observed, no further mitigation would be required. If species with a California Native Plant Society Rank of 2B or higher are observed, and have not otherwise been accounted for in an approved removal action or separate mitigation action (see **MM 4.4-6** for a~~A~~lkali mariposa lily), they shall be delineated with stakes and/or flagged for avoidance to the extent feasible. After the preconstruction survey determines the exact location of these species, if present, on the project site and the number of individuals or populations present, the project proponent/operator shall submit written documentation to the Kern County Planning and Natural Resources Department confirming implementation of the measures described below: a. The project proponent/operator shall work with the Lead Biologist(s) to determine presence of the subject plant species and identify all known locations of subject plant species to establish "avoidance areas". All species with a California Native Plant Society Rank of 2B or higher found within the project site that has not otherwise been accounted for in an approved removal action or separate mitigation action shall be avoided by a buffer of 50 feet. Sturdy, highly visible, orange plastic construction fencing (or equivalent material verified by the Lead Biologist(s)) shall be installed around all locations of detected plant species to protect from impacts during the construction phase, until they can be relocated. The fence shall be securely staked and installed in a durable manner that would be reasonably expected to withstand wind and weather events and last at least through the construction period. Permanent perimeter security fence around the solar field ~~Fencing~~ will ~~also~~ be installed in such a way as to avoid wildlife entanglement (i.e., installed with a 4-7-inch gap between the bottom of the fence and ground level) and promote wildlife permeability.~~Fencing~~ Construction fencing shall be removed upon completion of the project construction. b. Any identified species with a California Native Plant Society Rank of 2B or higher	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		present on the site that have not otherwise been accounted for in an approved removal action or separate mitigation action and that cannot be feasibly avoided in final project design shall require the project proponent to prepare and submit a transplantation plan that includes the following: 1. Identify an area of occupied habitat to be preserved and removed; 2. Identify areas of onsite or offsite preservation, restoration, or enhancement locations; 3. Methods for preservation, restoration, enhancement, and/or translocation; 4. Indicate a replacement ratio and success standard developed in coordination with the appropriate agencies for impacts to individuals; 5. Establish a monitoring program to ensure mitigation success; 6. Create an adaptive management and remedial measures in the event that performance standards are not achieved; 7. Ensure financial assurances and a mechanism for conservation of any mitigation lands required in perpetuity. c. Temporary ground disturbance associated with the gen-tie lines or collector lines shall be recontoured to natural grade (if the grade was modified during the temporary disturbance activity) and revegetated with an application of a native seed mix prior to or during seasonal rains to promote passive restoration of the area to pre-project conditions. However, if invasive plant species were present, these species would not be restored. An area subjected to temporary ground disturbance means any area that is disturbed but will not be subjected to further disturbance as part of the project. This does not include areas already designated as urban/developed. Prior to seeding temporary ground disturbance areas, the Lead Biologist(s) will review the seeding palette to ensure that no seeding of invasive plant species, as identified in the most recent version of the California Invasive Plant Inventory for the region, will occur. **MM 4.4-6:** Alkali mariposa lily, a rare plant species with a California Native Plant Society rank of 1.B2 was documented as present on the project site. If the project would eliminate more than 10 percent of the local population, a Habitat Mitigation Plan would be prepared and would include the following:	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		a. A figure illustrating the area of the population to be preserved, and the area of the population to be removed; b. Identification of on-site or off-site preservation, restoration, or enhancement location(s) and avoidance of those locations through the establishment of preservation areas and/or buffers; c. Methods for preservation, restoration, enhancement, and/or population translocation; d. A replacement ratio ~~and success standard criteria~~of 1:1 for occupied habitat or an alternative equivalent mitigation in coordination with the C~~c~~ounty; e. A five-year monitoring program to ensure mitigation success in accordance with the following survivorship percentage performance standard: 1. Because the plant lives above-ground during only a portion of its lifecycle, a minimum of 90 percent survival during one or more of the monitoring periods shall be considered success for this species. f. Adaptive management and remedial measures in the event that performance standards are not achieved; and g. Financial assurances and a mechanism for conservation of any mitigation lands required in perpetuity. A 1:1 mitigation ratio for occupied habitat is considered sufficient because alkali mariposa lily is not federally or state listed as threatened or endangered and is relatively common in the project area. Copies of all surveys and reports shall be submitted to the Kern County Planning and Community Development Department. **MM 4.4-7:** Prior to the issuance of grading permits, the project proponent shall provide proof of fee payment for the removal of silver cholla in accordance with the California Desert Native Plant Act to the Kern County Planning and Natural Resources Department. **MM 4.4-8:** The project shall avoid western Joshua tree (WJT) individuals, if feasible except to the extent take is permitted by the California Department of Fish and Wildlife (CDFW). If avoidance of WJT is not feasible, as determined by the Lead Biologist, and p~~P~~rior to the issuance of grading permits, the project applicant shall consult with CDFW ~~regarding~~ and obtain an incidental take	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		permit (ITP) for the take of WJT and shall comply with all avoidance, minimization, and compensatory mitigation measures, as set forth in any incidental take permit issued to the project by CDFW. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department. The project proponent shall also submit to the Kern County Planning and Natural Resources Department confirming documentation that the following has been implemented where take of WJT individuals cannot be avoided: a. Prior to the issuance of a grading permit, the project proponent/operator shall develop a Joshua Tree Preservation Plan or other similar plan as required by any incidental take permit issued to the project by CDFW. The Plan shall be prepared by the Lead Biologist(s) or their designee pre-approved by Kern County and shall be approved by the appropriate agencies, including Kern County, prior to implementation. At a minimum, the plan shall identify the methods utilized, as applicable, ~~that the project is taking~~ to comply with any California Endangered Species Act (CESA) or CDFW take requirements, including relocation methods, monitoring and reporting, and compensatory mitigation related to the protection or mitigation of impacted Joshua trees. The Plan shall also clearly delineate how the project includes restoration and enhancements of WJT habitats through relocation of a minimum of 900 onsite WJT stems to approved onsite or offsite conserved lands. b. Documentation of any such CDFW take authorization and mitigation implementation shall be provided to the Kern County Planning and Natural Resources Department to be kept on file. ~~The Plan shall also clearly delineate how the project includes restoration and enhancements of WJT habitats through relocation of a minimum of 900 onsite WJT stems to onsite or offsite lands.~~ c. Prior to final occupancy approval, a Post WJT Relocation Report shall be submitted to the Kern County Planning and Natural Resources Department documenting completion of WJT relocation. **MM 4.4-9:** Within a maximum of 30 days of the start of ground disturbance for construction or decommissioning activities, a Lead Biologist(s) or their designee knowledgeable in the identification of special-status wildlife species with potential to occur on the project site shall conduct pre-construction surveys for special-status wildlife species within the project site, as well	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		as within a minimum of 500 feet (where legally accessible) to determine if any special-status species are present. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur no more than 30 days prior to ground disturbance in specific areas of the site. **MM 4.4-10:** If construction and decommissioning activities are conducted during the typical nesting bird season (February 1 through August 31), the Lead Biologist(s) or their designee shall conduct a pre-construction or pre-decommissioning nesting survey within 10 days of ground disturbance activities to reduce potential impacts to avian species. Surveys need not be conducted for the entire project site at one time; they may be phased so that surveys occur within 10 days prior to disturbance in specific areas of the site. The survey area shall cover a 500-foot buffer (where legally accessible). a. If nesting birds/raptors are observed~~, and continuous monitoring by the qualified biologists(s) will occur,~~ the Lead Biologist(s) or approved Biological Monitor(s) shall establish an appropriate buffer distance around the nest site (typically 100 feet for passerines and up to 500 feet for Le Conte's thrasher and raptors) and if feasible, continuous monitoring by a qualified biologist shall occur. If continuous monitoring is not feasible, then a minimum no-disturbance buffer of ~~250~~ 100 feet will be established for non-listed passerines under the protection of MBTA. Continuous monitoring is required for listed passerines and raptors. The buffer shall remain in place until the Lead Biologist(s) or approved Biological Monitor(s) has determined that the nest is no longer active. Encroachment into the buffer may occur at the discretion of the Lead Biologist(s) in consultation with the Kern County Planning and Natural Resources Department. Nesting bird protections will only apply to MBTA, CESA, and/or ESA species and will not be applied to non-native bird species (i.e., European starlings, English sparrows, rock doves, etc.). b. If construction is scheduled to occur during the non-nesting season (September 1 to January 31), no pre-construction surveys or additional measures are required for nesting birds, including raptors. **MM 4.4-11:** No more than 14 days prior to commencement of ground-disturbing activities, the Lead Biologist(s) or their designee shall conduct a pre-construction survey in areas with suitable western burrowing owl habitat proposed for disturbance within the project site and 500-meter buffer (where legally accessible) to determine if occupied known and/or occupied nesting western	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		burrowing owl burrows are present. Burrowing owl burrows shall be evaluated and classified per the definitions below: a. Potential Burrow: Any subterranean hole four inches or larger for which no current evidence is present to conclude that the burrow is being used by a burrowing owl. b. Occupied Known Burrow: A burrow that shows sign of burrowing owl presence (whitewash, feathers, pellets, prey remains, eggshell fragments) and presence of at least one burrowing owl. If monitoring confirms that burrowing owl are no longer using a burrow, it will be redesignated as potential. c. Occupied Nesting Burrow: A burrow where monitoring overseen by the Lead Biologist(s) or approved Biological Monitor demonstrates the presence of burrowing owl eggs, chicks, dependent young, and/or brooding or egg incubation (via inter burrow scope). Survey methodology shall be consistent with the methods outlined in the 2012 California Department of Fish and Game Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 7 to 20 meters apart, adjusting for vegetation height and density as needed, and noting burrows with fresh burrowing owl sign or presence of burrowing owl. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur prior to disturbance in specific areas of the site. The western burrowing owl surveys may be conducted in conjunction with other required preconstruction surveys, if timing is appropriate. Copies of the survey results shall be submitted to the Kern County Planning and Natural Resources Department. a. If potential burrowing owl burrows are detected any time of year, burrows may be excavated under the direct supervision of the Lead Biologist without prior camera monitoring. b. If occupied known and/or occupied nesting burrowing owl burrows are detected, a no-disturbance buffer shall be established around the burrow and no ground-disturbing activities may occur within the buffer zone. c. An established burrowing owl burrow no-disturbance buffer may be removed once the burrowing owl(s) is/are no longer using the burrow (redesignated as a potential burrow). The size of employed no-disturbance buffers may be up to 500 meters from an occupied known and/or occupied nesting burrowing owl burrow year-round. Buffer size is dependent upon time of	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		year and level of construction activity disturbance. ~~Depending on the level of disturbance, a smaller buffer may be established by the Lead Biologist based on the visibility and sensitivity responses of each individual burrowing owl.~~ Ultimate buffer distances shall be determined in consultation with CDFW based on the visibility and sensitivity responses of each burrowing owl and as defined in the incidental take permit. Buffers shall be maintained for the duration the burrowing owl burrow remains occupied as determined by the Lead Biologist. In October 2024, western burrowing owl was designated a candidate species under the CESA. If, at the commencement of project construction, western burrowing owl is present and is either still a candidate species, or has been listed as threatened, or endangered under CESA, and avoidance of occupied known and/or occupied nesting western burrowing owl burrows is infeasible as determined by the Lead Biologist, the Applicant shall ~~consult with the California Department of Fish and Wildlife (CDFW) regarding the potential for project construction activities to result in take of burrowing owl~~ obtain an incidental take permit (ITP) for western burrowing owl and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ~~Incidental Take Permit (~~ITP~~)~~ issued for the project by CDFW authorizing take of the species. **MM 4.4-12:** If potential American badger or desert kit fox dens are found during pre-construction surveys, the status of the dens shall be evaluated by the Lead Biologist(s) or their designee no more than 30 days prior to project ground disturbance. a. If the Lead Biologist(s) determines that the den(s) are inactive, den(s) shall be collapsed by the Lead Biologist(s) to prevent occupation of the den(s) between the time of the preconstruction survey and construction activities. b. If the Lead Biologist(s) determines that the den(s) are active, construction activities shall not occur within 50 feet of an active badger den or 100 feet of an active kit fox den, unless otherwise approved by the Lead Biologist(s). c. If the Lead Biologist(s) determines that potential den(s) outside of the pupping season may be active, a passive relocation program can occur. The pupping season is defined as March 15–July 31 for American badger and February 1–August 31 for desert kit fox. The program shall consist of determining status of the den(s) (confirming it is a nonmaternity den through remote camera monitoring), excluding American badger or desert kit fox from the occupied nonmaternity den(s) by installation of one-way doors at burrow entrances, monitoring of the den for a minimum of 48 hours to confirm usage has been discontinued, and excavation and collapse of the den.	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		MM 4.4-13: If construction activities are scheduled to be initiated during the Swainson's hawk nesting season (March 1 through September 15), the Lead Biologist(s) or their designee shall conduct a preconstruction survey of all accessible areas within 0.5 mile of the planned disturbance area to determine the presence and activity of known or new Swainson's hawk nests. Inaccessible areas shall be surveyed by binocular or spotting scope. The preconstruction survey shall occur within 30 days prior to the start of construction. If construction is scheduled to commence outside of the Swainson's hawk nesting season (September 16 to February 28), no preconstruction surveys are required. The preconstruction nest survey shall follow the protocols set out in the CEC and CDFW Guidance (2010). To the extent feasible, the project proponent/operator shall design the project site to allow sufficient foraging and fledging area to maintain active Swainson's hawk nests located within 0.5 miles of the project site, if present. If preconstruction surveys detect a nesting Swainson's hawk within 0.5 miles of the project site, a 0.5-mile avoidance buffer shall be established around the nest by the Lead Biologist(s) or approved Biological Monitor(s) and no construction within the buffer shall be allowed until the Lead Biologist(s) has determined the nest is no longer active. Encroachment into the buffer may occur at the discretion of the Lead Biologist(s) in consultation with the California Department of Fish and Wildlife (CDFW). If at the commencement of project construction, Swainson's hawk remain listed as a State threatened species, and if active Swainson's hawk nests are found within a 5-mile radius of the project site during preconstruction surveys, the project proponent/operator shall mitigate the loss of any moderate quality Swainson's hawk foraging habitat for any portion of the project site within 5 miles of an active nest at a ratio up to 0.5:1. Mitigation lands may be nested with other compensatory lands provided it meets the necessary biological requirements. Avoided habitat would not count toward impacts in determining compensatory mitigation requirements and may be used to satisfy mitigation requirements if protected by a deed restriction or other conservation mechanism/strategy. If at the commencement of project construction, Swainson's hawk remain listed as a State threatened species, and if avoidance of an active nest is not feasible, the project proponent/operator shall consult with CDFW regarding the potential for project activities to result in take of the Swainson's hawk and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any Incidental Take Permit (ITP) issued for the project by CDFW authorizing take of the species. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Resources Department. **MM 4.4-14:** A Raven Management Plan shall be developed for the project site in accordance with U.S. Fish and Wildlife Service guidelines and shall implement management measures for ravens in the project area. This plan shall include at a minimum: a. Structure designs that eliminate perches, waste management, roadkill management, management of ponded water during construction and operations, and nest removal on structures within the project site and along the transmission line. b. Identification of all common raven nests within the project area during construction. c. Weekly inspections during construction under all nests in the project area for evidence of desert tortoise predation (e.g., scutes, shells, etc.). If evidence of desert tortoise predation is noted, a report shall be submitted to the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and the Kern County Planning and Natural Resources Department within five calendar days; and d. Provisions for the management of trash that could attract common ravens during the construction, operations and maintenance, and decommissioning phases of the proposed project. **MM 4.4-15:** Wherever possible, vegetation removal shall be minimized within the project site. Native vegetation shall remain undisturbed unless removal is necessary for placement of project components to allow for continued use by potential raptor prey species (i.e., small mammals, reptiles, and amphibians). a. Native vegetation adjacent to the project site shall remain in place as permitted by the Kern County Fire Code. b. In areas temporarily disturbed during construction and decommissioning (including grading or removal of root balls resulting in loose soil), the ground surface shall be revegetated with a native seed mix or native plants and/or allowed to re-vegetate with the existing native seed bank in the topsoil where possible to establish revegetation. c. Vegetation/ground cover shall be continuously maintained on the site by the project proponent/operator. **MM 4.4-16:** The project proponent/operator shall install power lines in conformance with Avian Power Line Interaction Committee (APLIC) standards for electrocution-reducing techniques as	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		outlined in Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC, 2006), and the collision-reducing techniques outlined in Reducing Avian Collisions with Power Lines: The State of the Art in 2012 (APLIC, 2012), or any superseding document issued by APLIC. **MM 4.4-17:** During the operation and maintenance phase of the project, an *Avian Mortality Monitoring Program* shall be developed and implemented to systematically and periodically determine the extent of mortality occurring because of collisions with solar arrays. The measures listed below apply to the program: a. The Avian Mortality Monitoring Program shall be developed following the Mortality Monitoring Design for Utility-Scale Solar Power Facilities and include methods to achieve Objective 1 (monitoring to estimate total bird and bat mortality). Methods include using a trained and skilled team of biologists to systematically sample the project site by walking transects through the solar arrays scanning for deceased birds. b. Data shall be collected on any encountered deceased bird (or any other wildlife) species including species, condition of the carcass, approximate age, presence of feathers, and the like. c. Additionally, maintenance personnel working on the project site who encounter injured or deceased birds (or any other wildlife) shall be trained to collect data and photograph the encountered species. d. Mortality monitoring shall be conducted for a minimum of a 1-year period following the commencement of the operation and maintenance phase of the project. e. If, after 1 year of mortality monitoring, project impacts to any avian species caused by the project are shown to result in a substantial, long-term reduction in the demographic viability of the population of the species in question, then adaptive management must be implemented to reduce impacts. Adaptive management measures may include but not be limited to passive avian diverter installations, the use of sound, light, or other means to discourage site use consistent with legal requirements, on site habitat management or control measures consistent with applicable legal requirements, or modification to support structures to exclude nesting birds. **MM 4.4-18**: Preconstruction surveys for Crotch's bumble bee shall be conducted prior to initial ground disturbing activities. The survey area shall consist of suitable habitat areas within the project site and 50-foot buffer (access permitting). Surveys and timing would be consistent with the survey	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		methodologies set out in the CDFW Survey Considerations for CESA Candidate Bumble Bee (CDFW, 2023) or as determined adequate for the project per coordination with the California Department of Fish and Wildlife (CDFW). The purpose of this survey will be to identify active Crotch's bumble bee nest colonies. a. If active Crotch's bumble bee nests are discovered onsite, the Lead Biologist(s) or approved Biological Monitor shall establish a 50-foot no disturbance buffer around the nest to reduce the risk of disturbance or accidental take. b. If establishment of a no disturbance buffer is feasible, construction activities shall not occur within the no disturbance buffer until the Lead Biologist(s) determines that the colony is no longer active (i.e., no Crotch's bumble bees are seen flying in or out of the nest for three consecutive days indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined inactive, construction activities within the no disturbance buffer(s) shall be allowed to resume. c. In June 2019, Crotch's bumble bee was designated a candidate species under the CESA. If, at the commencement of project construction, Crotch's bumble bee is present and is either still a candidate species, or has been listed as threatened, or endangered under CESA, and ~~If~~ avoidance of an active nest is not feasible, as determined by the Lead Biologist, the project proponent/operator shall ~~consult with CDFW regarding potential for project activities to result in~~ obtain an incidental take permit of the Crotch's bumble bee and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department. **MM 4.4-19:** Preconstruction surveys for small mammals including Mohave ground squirrel shall be conducted within suitable habitat 14 days prior to initial ground-disturbing activities. If a Mohave ground squirrel is found on the construction site, work shall be halted and redirected to areas not supporting this species, and consultation with the California Department of Fish and Wildlife (CDFW) shall occur. A written report shall be sent to CDFW within 5 calendar days of the sighting. The report shall include the date, time of the finding or incident (if known), and location of the animal. If a dead Mohave ground squirrel is encountered, the remains shall be collected, frozen as soon as possible, and CDFW shall be contacted to determine where the remains would be sent.	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		If it is determined from surveys that Mohave ground squirrels are not present, no further action would be required. If Mohave ground squirrels are detected during preconstruction surveys or construction monitoring, the project proponent shall prepare a Mohave Ground Squirrel Avoidance and Monitoring Plan. The Mohave Ground Squirrel Avoidance and Monitoring Plan shall include, at a minimum: a. Specifications for designation of the Lead Biologist(s) or approved Biological Monitor(s) for conducting surveys and monitoring. b. Methods for excluding Mohave ground squirrels from the work area, such as fencing. c. Measures and procedures related to monitoring of construction for presence of Mohave ground squirrels. d. A requirement to cease work if a Mohave ground squirrel is encountered in a work area. e. Requirements for the worker environmental awareness training and education program training as it pertains to Mohave ground squirrels reporting requirements. f. All documented active Mohave ground squirrel burrows shall be avoided by a minimum of 50 feet to avoid take and potentially significant impacts; if avoidance is not feasible, the project proponent/operator shall consult with CDFW regarding potential for project activities to result in take of Mohave ground squirrel and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any Incidental Take Permit issued for the project by CDFW authorizing take of the species. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department. **MM 4.4-20:** No more than 30 days prior to commencement of ground-disturbing activities, the Lead Biologist(s) or their designee shall conduct a pre-construction survey in areas with suitable desert tortoise habitat proposed for disturbance within the project site to determine if desert tortoise are present. Pre-construction surveys shall adhere to the current U.S. Fish and Wildlife Service (USFWS) clearance survey protocols described in the Desert Tortoise Field Manual, including a minimum of two clearance passes, which shall coincide with heightened desert tortoise activity from late March through May and September through October or as or as determined adequate for the project per coordination with applicable regulatory agencies. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur prior to disturbance in specific areas of the site. The desert tortoise surveys may be conducted in conjunction with other required preconstruction surveys, if timing is	

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Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		appropriate. Copies of the survey results shall be submitted to the Kern County Planning and Natural Resources Department. If avoidance of desert tortoise is not feasible, the project proponent/operator shall consult with USFWS and California Department of Fish and Wildlife (CDFW) regarding the potential for project activities to result in take of the desert tortoise and shall comply with all avoidance (including prescribed preconstruction surveys), minimization, and compensatory mitigation requirements set forth in any issued permit for the project. USFWS and CDFW take authorization requirements shall supersede County requirements. Documentation of any such take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department. **MM 4.4-21:** A weed control plan shall be prepared to address the control of invasive weeds and plants. The weed control plan shall be in place prior to construction activities and shall be completed to the satisfaction of the Kern County Planning and Natural Resources Department. The plan shall include a risk assessment of the invasive weed and plant species currently known within the project site, procedures to control their spread on-site and to adjacent offsite areas, and procedures to minimize the introductions of new weed and plant species. The Weed Control Plan shall include preventive measures that would minimize the potential establishment of invasive weed and plant species during project implementation, including the O&M phase. To minimize the spread and establishment, tires and surfaces of all trucks and construction equipment shall be cleaned with water or high-pressure air prior to commencing work in off-site areas, and/or the use of rocks/grates at the entries to the project site shall be installed to physically dislodge seeds. Certified weed-free mulch shall be used when stabilizing areas of disturbed soils and onsite soils shall be used to the maximum extent practicable for fill. This measure also shall apply during decommissioning activities.	
4.14 Public Services			
Impact 4.14-1: The project would result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts,	Potentially significant	**MM 4.14-2:** Payment of property taxes or Cumulative Impact Charge (CIC): a. The project shall pay all legally required property taxes; or b. If the project qualifies, based on State Legislative action and the State Board of Equalization guidance, for any reduction in property taxes under a Solar Tax Exclusion or other specific property tax relief for solar or battery storage regardless of the name, then the following CIC shall apply. The first annual payment is to be paid by December 31 of the year the first legislatively provided property tax reduction is assessed, and	Less than significant

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services or police protection and law enforcement services.		annually every year for the life of the project, or as a lump sum for multiple years, until the project is decommissioned and the Conditional Use Permit(s) is/are voided. 1. Submittal of Building Permit or Calculation of Amount A. Any building permit or calculation of amount submitted shall be accompanied by a map and legal description of the entire approved Conditional Use Permit area. B. The map shall calculate the CIC net acreage as follows: i. Total gross acreage of the approved Conditional Use Permit. ii. Total acres of recorded easements. iii. Delineation (using, for example, areas on a site plan) of any permanent structures or energy storage that is not covered under a property tax reduction and evidence from legislation or State Board of Equalization that they have no reduction in taxes. C. Formula is Net Acreage = B.i minus (B.ii and B.iii), if applicable. D. Temporary storage areas or non-permanent commercial coaches or cargo containers for construction or operations are not eligible for inclusion under B.~~3~~iii, above. E. All areas of buildings, accessory improvements and easements used in the calculations shall be shown on the submitted Map. 2. Calculation of CIC and annual payment A. A payment of up to a maximum of $690 per net acre (calculated above in provision b.1.C) shall be paid annually. The payment shall cover the net acreage for the entire approved Conditional Use Permit(s) regardless of phased implementation of building permits, the total number of building permits, or type of building permit issued. B. The first annual payment is to be paid by December 31 of the year the first property tax reduction is assessed. If it is not paid by December 31 of that year, then a notice of violation of the Conditional Use Permit shall be filed and the procedure in Chapter 19.114 of the Kern County Zoning Ordinance shall commence immediately under the authority of the Planning and Natural Resources Department Director.	

TABLE 1-7: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		C. Annual payments are due every year by the anniversary date of the first payment. D. Payments shall be made to the Planning and Natural Resources Department for transfer directly to the County Administrative Office Fiscal Division (CAO) and labeled CIC with the project name, location and APNs. E. An advance payment option for a lump sum of all payment years, or a reduction in each year's payment for 5 or more years, may be requested by submittal of a written request to the Planning and Natural Resources Department with details of the offer no later than 60 days before the annual payment is due. A 10% discount in the lump sum amount will be applied if the advance payment option is accepted by the CAO by written response.	

Chapter 3, Project Description, Page 3-1—3-50

The following **Chapter 3**, *Project Description* changes have been made to reflect the Project Infill Area described in detail in **Appendix N,** *Revised Project Design – Additional Environmental Information* and are applied globally throughout the Draft EIR.

3.1 Introduction

This Environmental Impact Report (EIR) has been prepared by Kern County (County), which is the Lead Agency, to identify and evaluate potential environmental impacts associated with the construction, operation, and decommissioning of the Galaxy Solar PV & Storage Project (project) proposed by Galaxy Solar Storage, LLC (project proponent). The project proposes to develop and operate an up to 600-megawatt (MW) photovoltaic (PV) solar facility, which may include up to 4 gigawatt-hours (GWh) of energy storage capacity (approximately 1,000 MW), on an approximately ~~3,400~~3,519-acre project site, across ~~162~~184 privately owned parcels in an unincorporated area of southeastern Kern County, California. The project described herein includes the Project Infill Area and associated minor project modifications described in greater detail in the *Revised Project Design – Additional Environmental Information,* provided as **Appendix N** of this EIR and incorporated by reference herein.

PV solar panels, a power collection system, including medium-voltage (MV) lines that connect the solar facilities, inverters, foundations, and transformers will be installed onsite. Associated project infrastructure includes an operations and maintenance (O&M) facility, telecommunication facilities, energy storage system(s), an onsite collector substation, a 230-kilovolt (kV) switchyard, interconnection and transmission systems, and offsite water storage tanks for construction and operation. A temporary offsite laydown area would be placed adjacent to State Route (SR)-58, at the northern extent of the project site. The proposed project also includes a generation-tie (gen-tie) line to connect the project to the existing Southern California Edison (SCE) Windhub Substation, and infrastructure corridors for medium-voltage transmission lines and water transport. The project may be constructed in multiple phases. The project proponent has requested Zone Classification Changes (ZCC) to change the existing base zoning district (excluding their combining zone classification) to the A (Exclusive Agriculture) District. Solar energy electrical generators are authorized within the A District with approval of a Conditional Use Permit (CUP) pursuant to Section 19.12.030.G. of the Kern County Zoning Ordinance. An amendment to the Land Use Element of the Kern County General Plan is included in the request to ensure consistency between zoning and underlying land use designations, pursuant to Government Code § 65860. Therefore, concurrent approval of the requested GPA, ZCCs and the CUPs, in addition to other land use entitlements listed below, are required to develop the project. Private gen-tie lines connecting to the electric grid are exempt from Kern County zoning. Construction and operation of the proposed gen-tie lines and other infrastructure corridors, although proposed to be analyzed as part of the overall project, require separate land use permits granted by the Kern County General Services Division.

Power generated by the proposed project would be delivered to the existing SCE Windhub Substation from the onsite collector substation via approximately 16 miles of 230-kV gen-tie line within both new and existing gen-tie corridors, including new poles within the boundaries of the Enterprise Solar Storage Project and between the new 230-kV switchyard and the SCE Windhub Substation. The project would interconnect to the existing SCE Windhub Substation from the north or west. Final design, layout, and required

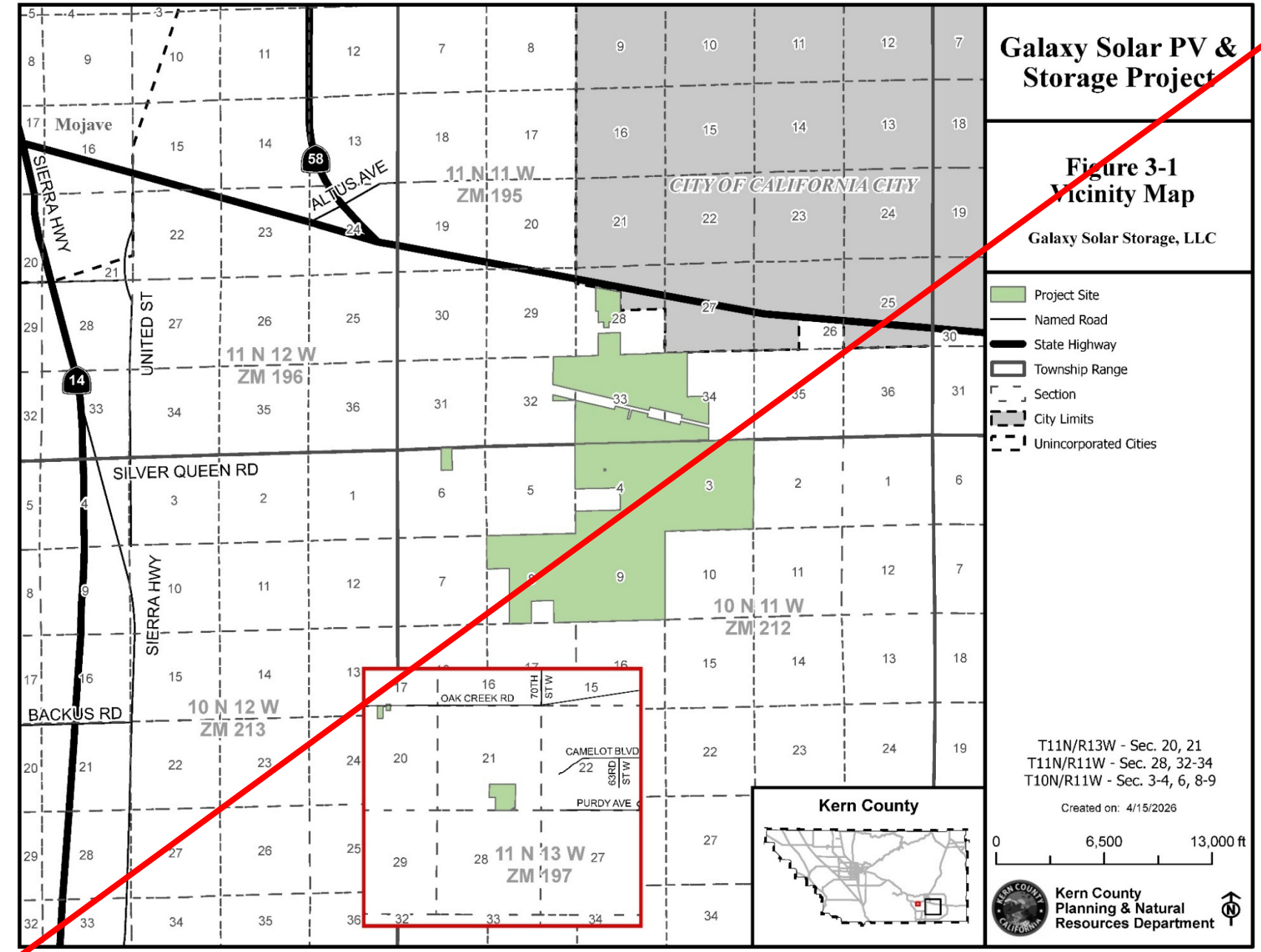
interconnection components would be determined during the detailed engineering design stage. Additional details are provided in **Section 3.7.5**, *Transmission, Switchyard, and Grid Interconnection*, below.

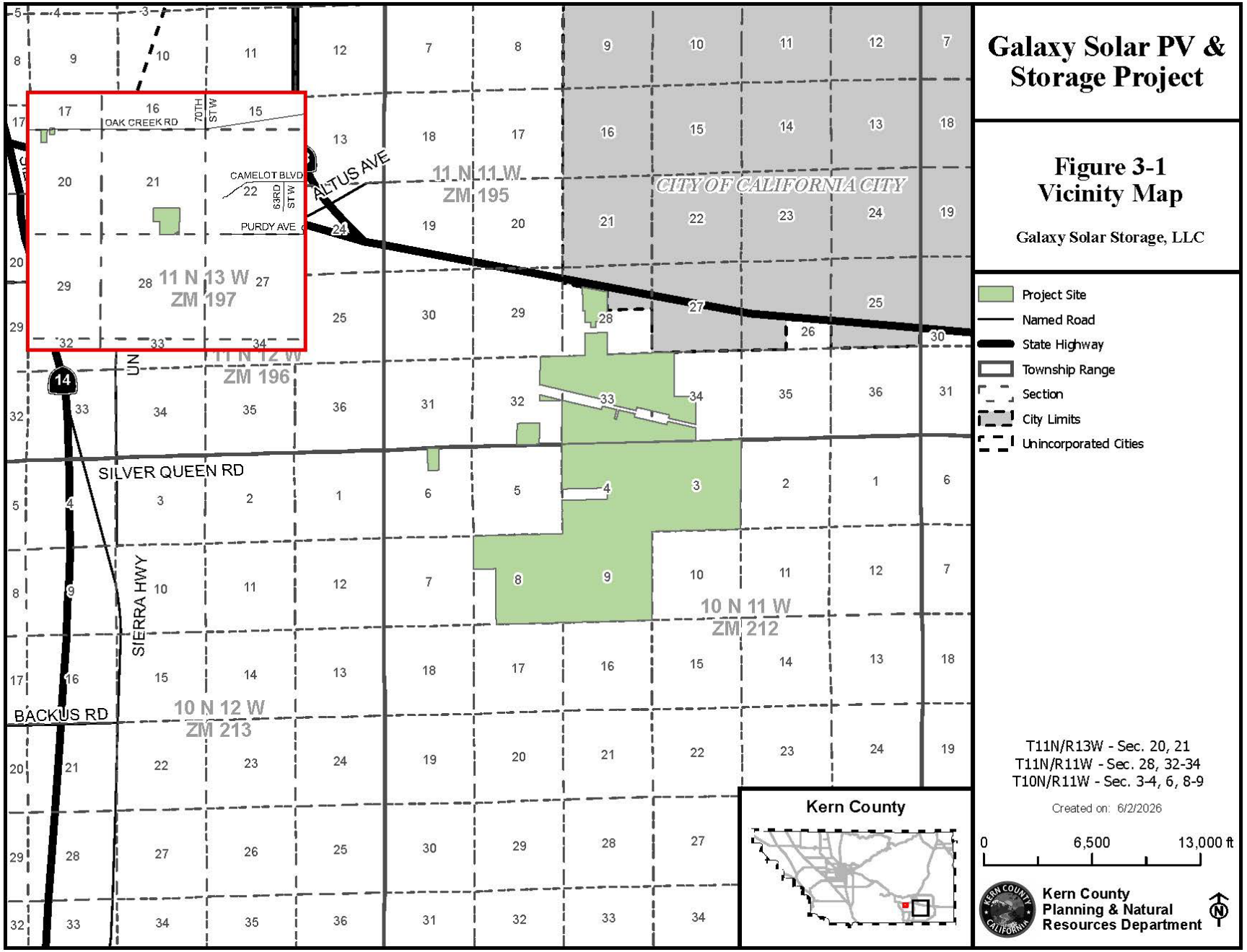
3.2 Project Location

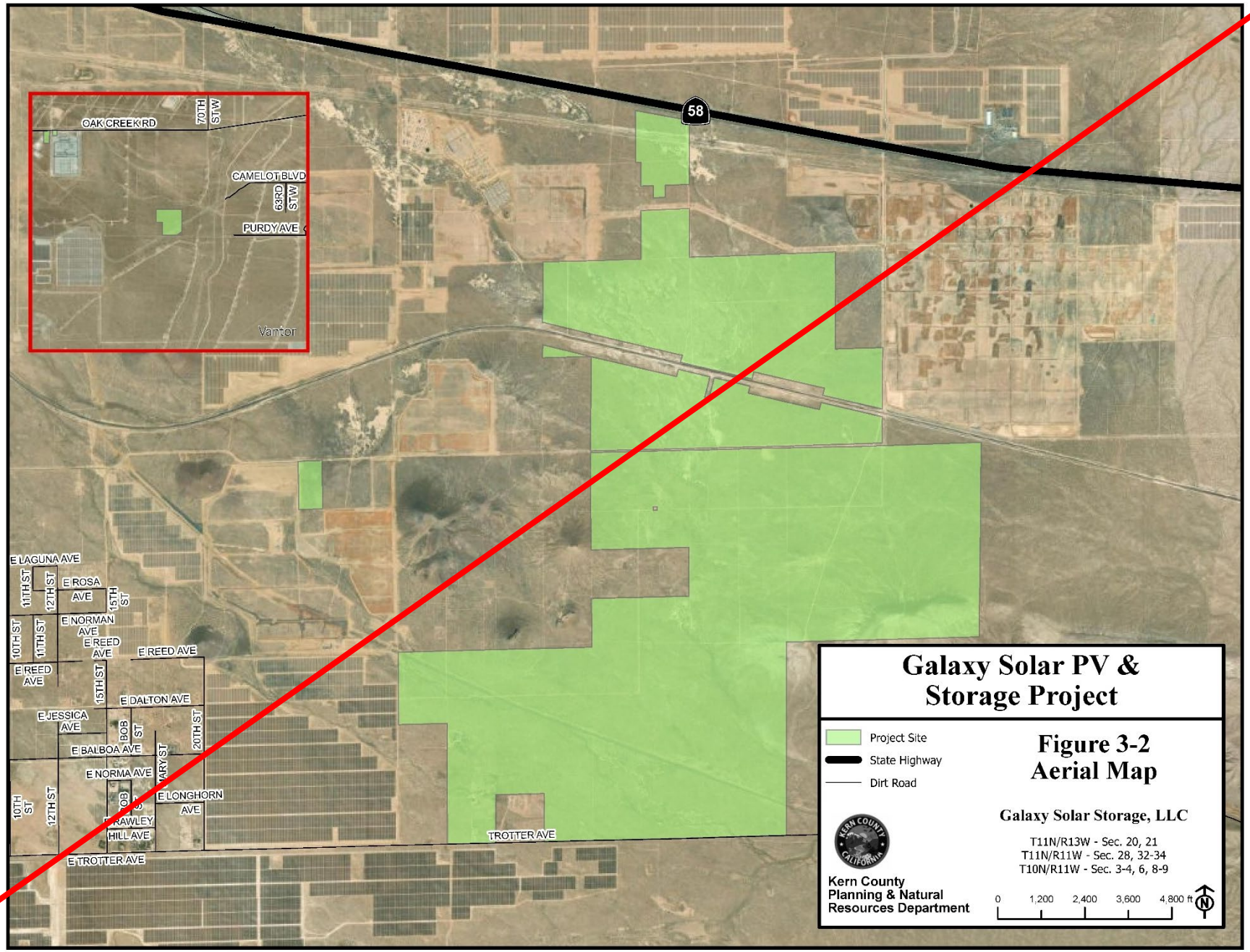
The project site is located at the northern edge of the Antelope Valley, approximately 6 miles southeast of the community of Mojave, approximately 8 miles northeast of the community of Rosamond, and approximately 8 miles northwest of the main base of Edwards Air Force Base (AFB), as shown in **Figure 3-1,** *Vicinity Map*. The project is located within the Bissell and Sanborn U.S. Geological Survey (USGS) 7.5-minute quadrangles, and spans multiple Townships, Ranges, and Sections including the following: Townships 10 and 11 North, Range 11 West, and Sections 3, 4, 8, 9, 28, and 32-34.

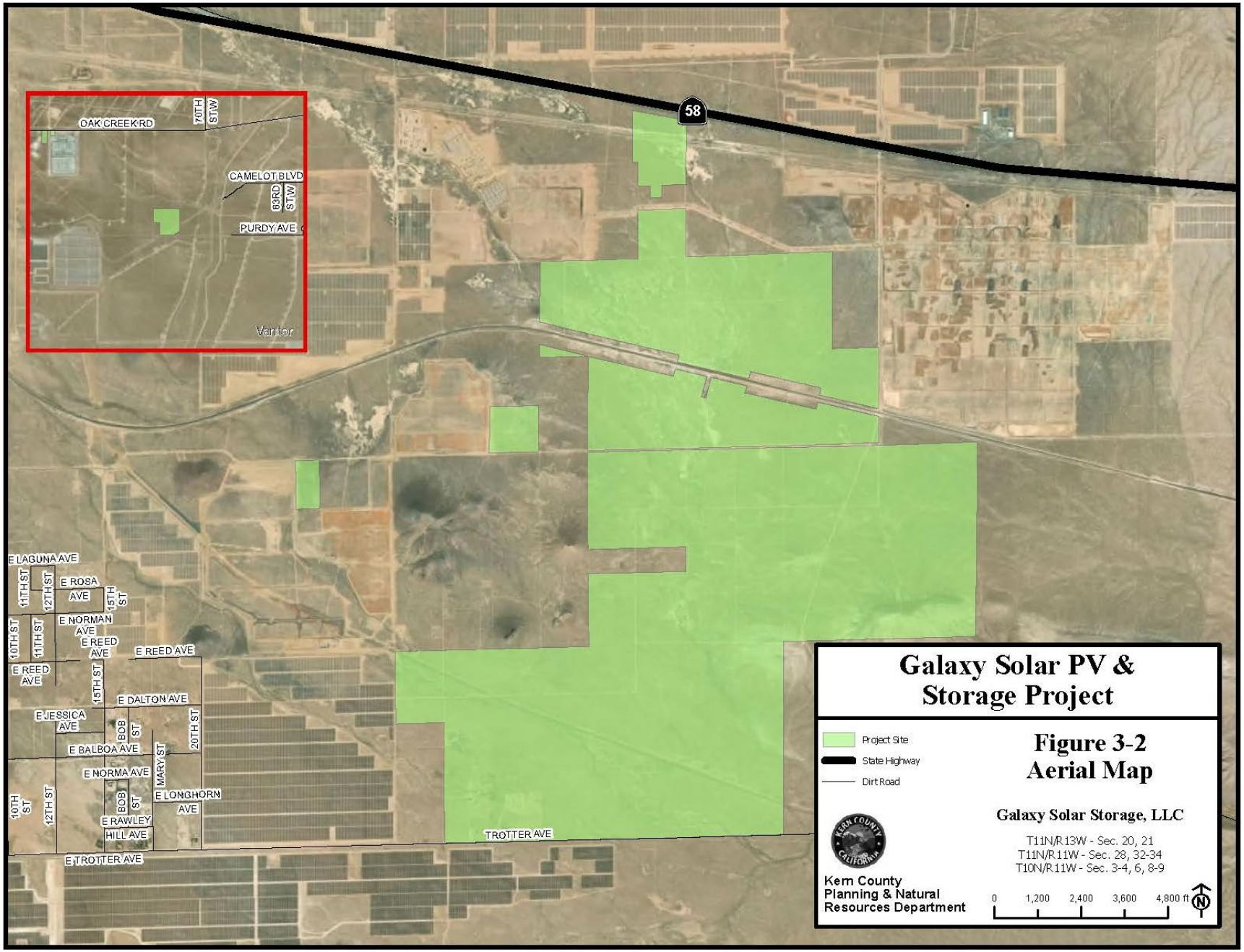
The project boundary is shown in **Figure 3-2**, *Aerial Map*. All temporary laydown areas will be located within the project site boundary, with the exception of one temporary offsite laydown area to be located adjacent to SR-58, at the northern extent of the project site. The project would interconnect via gen-tie facilities to the SCE Windhub Substation as shown on **Figure 3-3,** *Proposed Site Plan* and as described above.

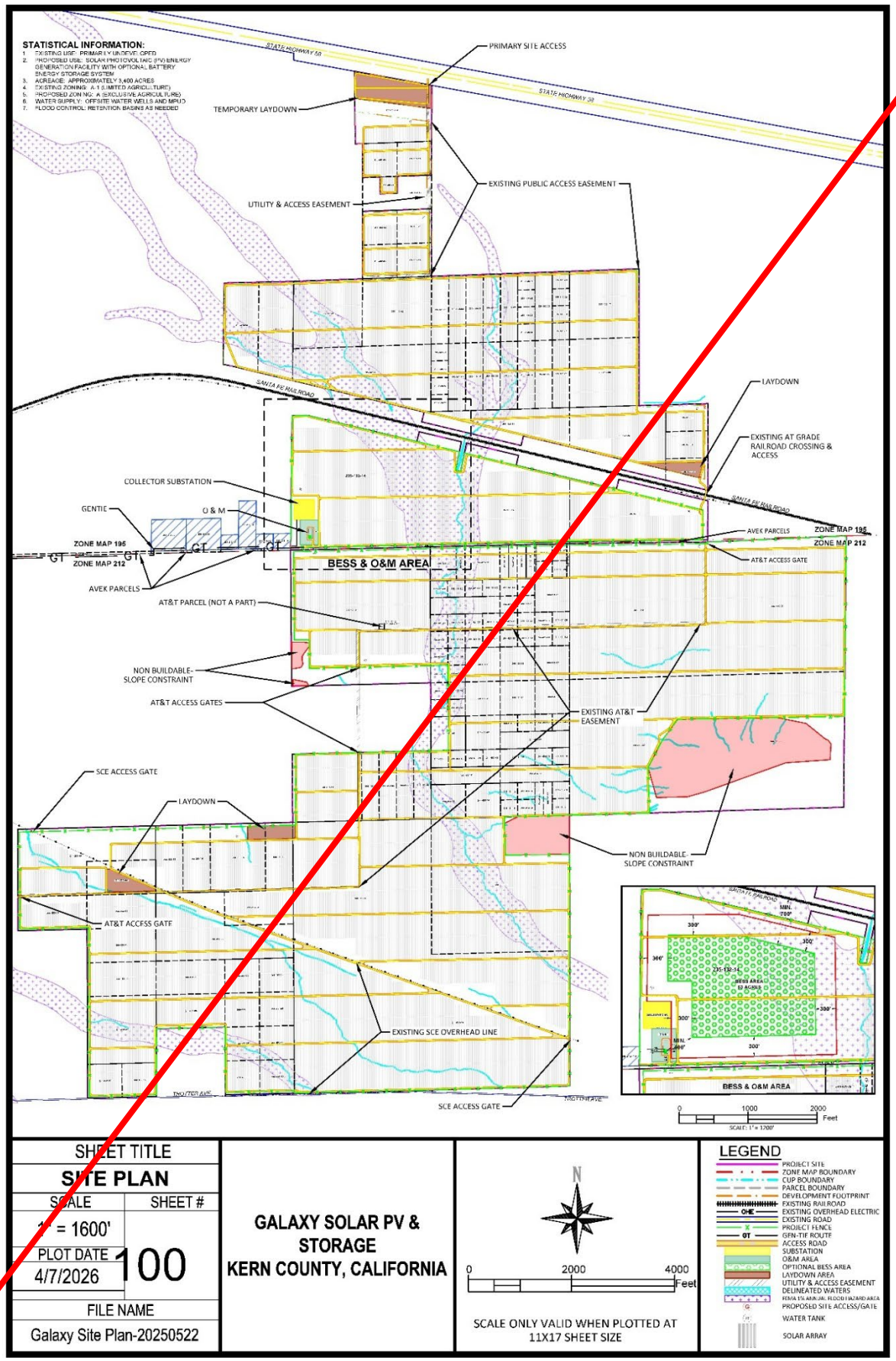
The project site consists of ~~162~~184 privately owned parcels that have been purchased, leased, or are in the process of purchase or lease acquisition by the project proponent (and whose owners have agreed to be part of the project), plus approximately 17.4 acres of a 43.69-acre offsite parcel that would be used as a temporary construction laydown area. The Assessor Parcel Numbers (APN) and additional parcel details, including existing land uses and acreages, are included in **Table 3-1**, *Project Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages*.

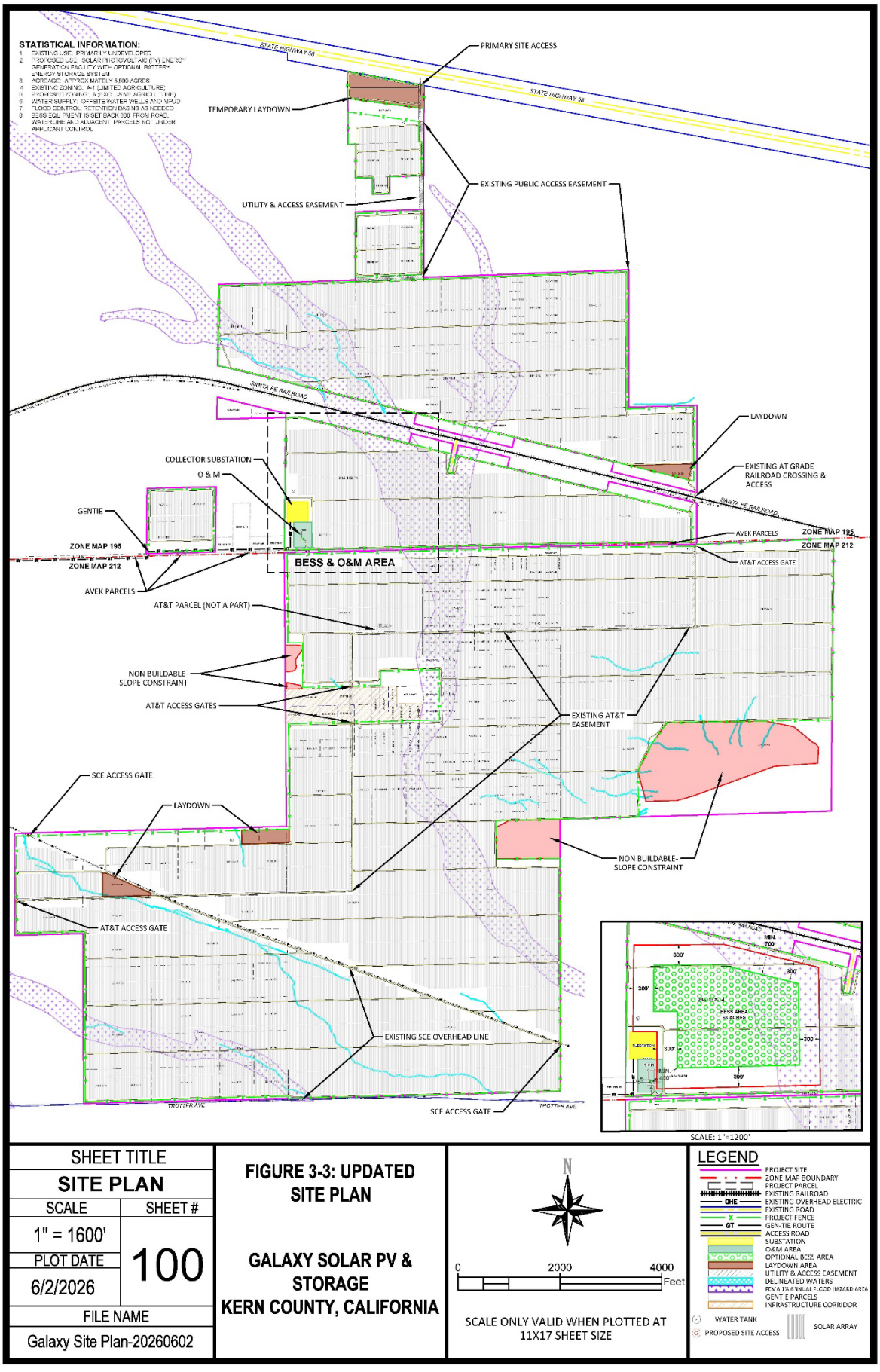

Galaxy Solar PV & Storage Project
Figure 3-1
Vicinity Map
Galaxy Solar Storage, LLC
Project Site
Named Road
State Highway
Township Range
Section
City Limits
Unincorporated Cities
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
Created on: 4/15/2026
0 6,500 13,000 ft
Kern County Planning & Natural Resources Department
Kern County
Mojave
SIERRA HWY
ALTUS AVE
UNITED ST
SILVER QUEEN RD
BACKUS RD
OAK CREEK RD
CAMELOT BLVD
PURDY AVE
70TH ST W
63RD ST W
CITY OF CALIFORNIA CITY
11 N 11 W ZM 195
11 N 12 W ZM 196
10 N 11 W ZM 212
10 N 12 W ZM 213
11 N 13 W ZM 197
58
14

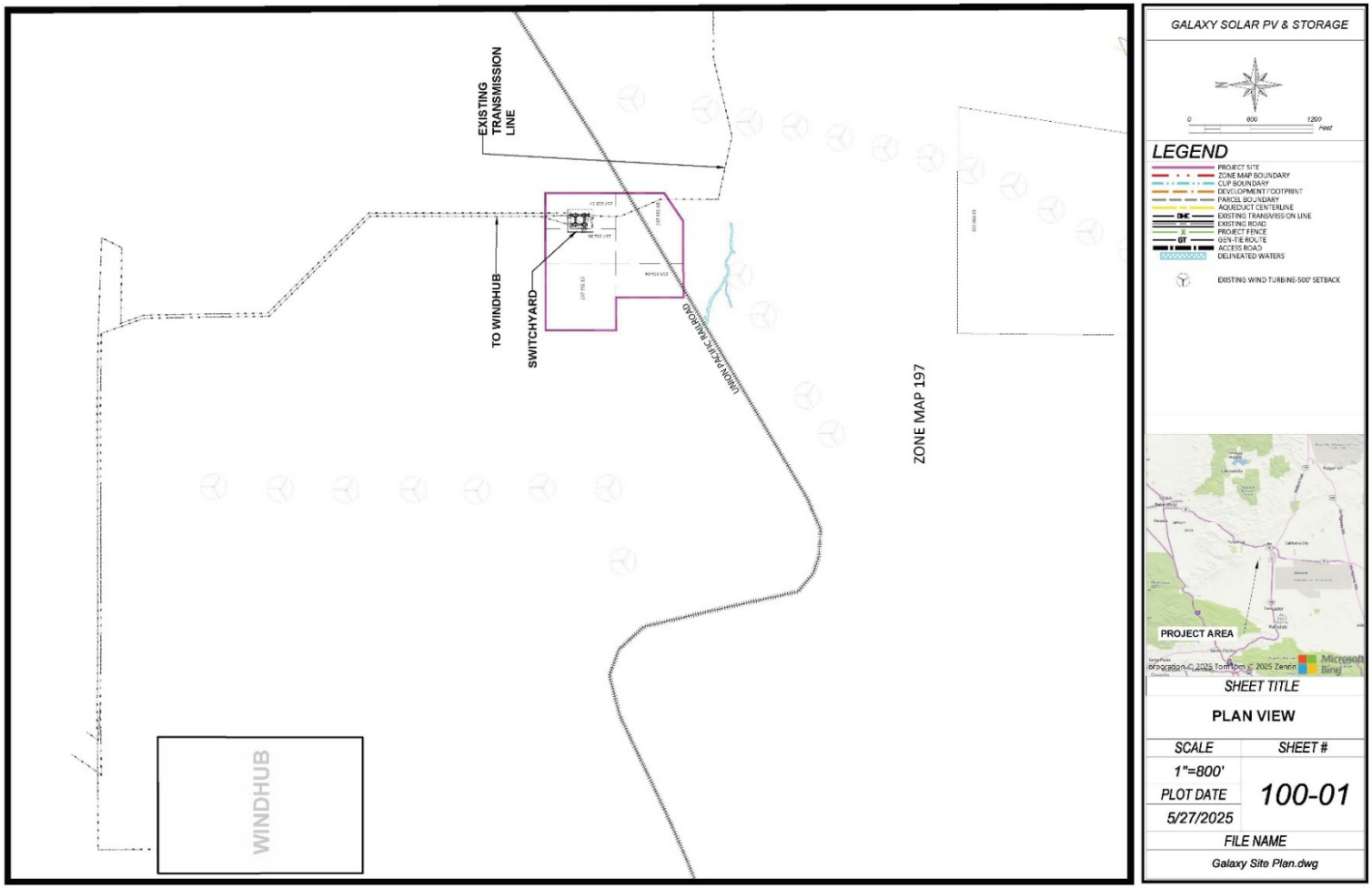

Galaxy Solar PV & Storage Project
Figure 3-1
Vicinity Map
Galaxy Solar Storage, LLC
Project Site
Named Road
State Highway
Township Range
Section
City Limits
Unincorporated Cities
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
Created on: 6/2/2026
0
6,500
13,000 ft
Kern County
Planning & Natural Resources Department
Kern County
OAK CREEK RD
70TH ST W
CAMELOT BLVD
63RD ST W
PURDY AVE
ALTUS AVE
11 N 11 W
ZM 195
CITY OF CALIFORNIA CITY
11 N 13 W
ZM 197
11 N 12 W
ZM 196
SILVER QUEEN RD
SIERRA HWY
10 N 11 W
ZM 212
10 N 12 W
ZM 213
BACKUS RD


58
OAK CREEK RD
70TH ST W
CAMELOT BLVD
63RD ST W
PURDY AVE
Vantor
E LAGUNA AVE
11TH ST
12TH ST
E ROSA AVE
15TH ST
E NORMAN AVE
10TH ST
E REED AVE
E DALTON AVE
E JESSICA AVE
BOB ST
E BALBOA AVE
MARY ST
20TH ST
E NORMA AVE
E LONGHORN AVE
RAWLEY HILL AVE
E TROTTER AVE
TROTTER AVE
Galaxy Solar PV & Storage Project
Project Site
State Highway
Dirt Road
Figure 3-2
Aerial Map
Galaxy Solar Storage, LLC
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
Kern County
Planning & Natural
Resources Department
0 1,200 2,400 3,600 4,800 ft
N


58
OAK CREEK RD
70TH ST W
CAMELOT BLVD
63RD ST W
PURDY AVE
Vantor
E LAGUNA AVE
11TH ST
12TH ST
E ROSA AVE
15TH ST
10TH ST
E NORMAN AVE
E REED AVE
E DALTON AVE
E JESSICA AVE
BOB ST
E BALBOA AVE
20TH ST
MARY ST
E NORMA AVE
E LONGHORN AVE
E RAWLEY HILL AVE
TROTTER AVE
Galaxy Solar PV & Storage Project
Project Site
State Highway
Dirt Road
Figure 3-2
Aerial Map
Galaxy Solar Storage, LLC
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
Kern County
Planning & Natural
Resources Department
0 1,200 2,400 3,600 4,800 ft
N


STATISTICAL INFORMATION:
1. EXISTING USE: PRIMARILY UNDEVELOPED
2. PROPOSED USE: SOLAR PHOTOVOLTAIC (PV) ENERGY GENERATION FACILITY WITH OPTIONAL BATTERY ENERGY STORAGE SYSTEM
3. ACREAGE: APPROXIMATELY 3,400 ACRES
4. EXISTING ZONING: A-1 (LIMITED AGRICULTURE)
5. PROPOSED ZONING: A (EXCLUSIVE AGRICULTURE)
6. WATER SUPPLY: OFFSITE WATER WELLS AND MPUD
7. FLOOD CONTROL: RETENTION BASINS AS NEEDED
STATE HIGHWAY 58
PRIMARY SITE ACCESS
TEMPORARY LAYDOWN
EXISTING PUBLIC ACCESS EASEMENT
UTILITY & ACCESS EASEMENT
SANTA FE RAILROAD
LAYDOWN
EXISTING AT GRADE RAILROAD CROSSING & ACCESS
COLLECTOR SUBSTATION
GENTIE
O & M
ZONE MAP 196
ZONE MAP 212
GT
AVEK PARCELS
BESS & O&M AREA
AT&T ACCESS GATE
AT&T PARCEL (NOT A PART)
NON BUILDABLE- SLOPE CONSTRAINT
AT&T ACCESS GATES
EXISTING AT&T EASEMENT
SCE ACCESS GATE
LAYDOWN
NON BUILDABLE- SLOPE CONSTRAINT
AT&T ACCESS GATE
EXISTING SCE OVERHEAD LINE
SCE ACCESS GATE
TWO TEN AVE
ONE TEN AVE
BESS & O&M AREA
0 1000 2000 Feet
SHEET TITLE
SITE PLAN
SCALE
1" = 1600'
SHEET #
100
PLOT DATE
4/7/2026
FILE NAME
Galaxy Site Plan-20250522
GALAXY SOLAR PV & STORAGE
KERN COUNTY, CALIFORNIA
N
0 2000 4000 Feet
SCALE ONLY VALID WHEN PLOTTED AT 11X17 SHEET SIZE
LEGEND
PROJECT SITE
ZONE MAP BOUNDARY
CUP BOUNDARY
PARCEL BOUNDARY
DEVELOPMENT FOOTPRINT
EXISTING RAILROAD
OHE EXISTING OVERHEAD ELECTRIC
EXISTING ROAD
PROJECT FENCE
GT GEN-TIE ROUTE
ACCESS ROAD
SUBSTATION
O&M AREA
OPTIONAL BESS AREA
LAYDOWN AREA
UTILITY & ACCESS EASEMENT
DELINEATED WATERS
FEMA 1% ANNUAL FLOOD HAZARD AREA
PROPOSED SITE ACCESS/GATE
WATER TANK
SOLAR ARRAY


STATISTICAL INFORMATION:
1. EXISTING USE: PRIMARILY UNDEVELOPED
2. PROPOSED USE: SOLAR PHOTOVOLTAIC (PV) ENERGY GENERATION FACILITY WITH OPTIONAL BATTERY ENERGY STORAGE SYSTEM
3. ACREAGE: APPROXIMATELY 3,500 ACRES
4. EXISTING ZONING: A-1 (LIMITED AGRICULTURE)
5. PROPOSED ZONING: A (EXCLUSIVE AGRICULTURE)
6. WATER SUPPLY: OFFSITE WATER WELLS AND MPUD
7. FLOOD CONTROL: RETENTION DAS NS AS NEEDED
8. BESS EQUIPMENT IS SET BACK 300 FROM ROAD, WATERLINE AND ADJACENT PARCELS NO UNDER APPLICANT CONTROL
STATE HIGHWAY 58
PRIMARY SITE ACCESS
TEMPORARY LAYDOWN
EXISTING PUBLIC ACCESS EASEMENT
UTILITY & ACCESS EASEMENT
SANTA FE RAILROAD
LAYDOWN
COLLECTOR SUBSTATION
O & M
EXISTING AT GRADE RAILROAD CROSSING & ACCESS
GENTIE
ZONE MAP 195
ZONE MAP 212
AVEK PARCELS
BESS & O&M AREA
AT&T ACCESS GATE
AT&T PARCEL (NOT A PART)
NON BUILDABLE- SLOPE CONSTRAINT
AT&T ACCESS GATES
EXISTING AT&T EASEMENT
SCE ACCESS GATE
LAYDOWN
AT&T ACCESS GATE
EXISTING SCE OVERHEAD LINE
SCE ACCESS GATE
TROTTER AVE
SCALE: 1"=1200'
SHEET TITLE
SITE PLAN
SCALE
1" = 1600'
SHEET #
100
PLOT DATE
6/2/2026
FILE NAME
Galaxy Site Plan-20260602
FIGURE 3-3: UPDATED SITE PLAN
GALAXY SOLAR PV & STORAGE
KERN COUNTY, CALIFORNIA
N
0
2000
4000
Feet
SCALE ONLY VALID WHEN PLOTTED AT 11X17 SHEET SIZE
LEGEND
PROJECT SITE
ZONE MAP BOUNDARY
PROJECT PARCEL
EXISTING RAILROAD
EXISTING OVERHEAD ELECTRIC
EXISTING ROAD
PROJECT FENCE
GEN-TIE ROUTE
ACCESS ROAD
SUBSTATION
O&M AREA
OPTIONAL BESS AREA
LAYDOWN AREA
UTILITY & ACCESS EASEMENT
DELINEATED WATERS
GENTIE PARCELS
INFRASTRUCTURE CORRIDOR
WATER TANK
PROPOSED SITE ACCESS
SOLAR ARRAY



Galaxy Solar PV & Storage Project by Galaxy Solar Storage, LLC	**Figure 3-3** **Proposed Site Plan- View 1**	**Kern County Planning & Natural Resources Department** 8/12//25

TABLE 3-1: PROJECT ASSESSOR PARCEL NUMBERS, EXISTING AND PROPOSED LAND USE ZONINGS, AND ACREAGES

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
CUP 4, MAP 195										
1	195	235-102-05	63.67	63.67	KCGP	8.5	8.5	A-1	A	No
2	195	235-102-08	40	40	KCGP	8.5	8.5	A-1	A	No
3	195	235-102-17	40	40	KCGP	8.5	8.5	A-1	A	No
4	195	235-102-23	10	10	KCGP	8.5	8.5	A-1	A	No
5	195	235-102-24	10	10	KCGP	8.5	8.5	A-1	A	No
6	195	235-102-25	10	10	KCGP	8.5	8.5	A-1	A	No
7	195	235-102-26	47.93	47.93	KCGP	8.5	8.5	A-1	A	No
8	195	235-132-14	275.34	275.34	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
9	195	235-134-14	41.62	~~24.22~~18.31	KCGP	8.5	8.5	A-1	A	No
10	195	235-140-01	40	40	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
11	195	235-140-02	40	40	KCGP	8.5	8.5	A-1	A	No
12	195	235-140-03	10	10	KCGP	8.5	8.5	A-1	A	No
13	195	235-140-04	10	10	KCGP	8.5	8.5	A-1	A	No
14	195	235-140-05	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
15	195	235-140-06	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
16	195	235-140-07	10	10	KCGP	8.5	8.5	A-1	A	No
17	195	235-140-09	10	10	KCGP	8.5	8.5	A-1	A	No
18	195	235-140-11	10	10	KCGP	8.5	8.5	A-1	A	No
19	195	235-140-12	10	10	KCGP	8.5	8.5	A-1	A	No
20	195	235-140-13	10	10	KCGP	8.5	8.5	A-1	A	No
21	195	235-140-14	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
22	195	235-140-15	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
23	195	235-140-16	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
24	195	235-140-17	10	10	KCGP	8.5	8.5	A-1	A	No
25	195	235-140-19	62	62	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
26	195	235-140-21	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
27	195	235-140-22	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
28	195	235-140-24	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
29	195	235-140-25	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
30	195	235-140-26	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
31	195	235-140-27	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
32	195	235-140-28	2.58	2.58	KCGP	8.5	8.5	A-1	A	No
33	195	235-140-29	2.58	2.58	KCGP	8.5	8.5	A-1	A	No
34	195	235-140-30	2.58	2.58	KCGP	8.5	8.5	A-1	A	No
35	195	235-140-31	2.58	2.58	KCGP	8.5	8.5	A-1	A	No
36	195	235-140-33	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
37	195	235-140-34	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
38	195	235-212-18	10.00	10.00	KCGP	8.5	8.5	A-1	A	10.00
39	195	235-212-19	10.00	10.00	KCGP	8.5	8.5	A-1	A	10.00
40	195	235-212-20	9.32	9.32	KCGP	8.5	8.5	A-1	A	9.32
41	195	235-212-21	9.32	9.32	KCGP	8.5	8.5	A-1	A	9.32
3842	195	235-401-05	10.23	10.23	KCGP	8.5	8.5	A-1	A	No
3943	195	235-401-06	10.23	10.23	KCGP	8.5	8.5	A-1	A	No
4044	195	235-401-16	~~2.56~~2.55	~~2.56~~2.55	KCGP	8.5	8.5	A-1	A	No
4145	195	235-402-04	10.23	10.23	KCGP	8.5	8.5	A-1	A	10.23
~~42~~46	195	235-402-05	10.23	10.23	KCGP	8.5	8.5	A-1	A	10.23
~~43~~47	195	235-402-06	10.23	10.23	KCGP	8.5	8.5	A-1	A	10.23
~~44~~48	195	235-402-07	10.23	10.23	KCGP	8.5	8.5	A-1	A	10.23
~~45~~49	195	235-410-34	~~30.52~~30.89	~~30.52~~26.03	KCGP	8.5	8.5	A-1	A	No
~~46~~50	195	235-410-35	~~31.43~~31.89	~~31.43~~26.03	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
CUP 4, MAP 195 TOTALS:			~~966.77~~1,005.23	~~949.3~~974.95						~~40.92~~79.56
					CUP 7, MAP 212					
~~47~~51	212	244-220-01	321.82	321.82	KCGP	8.5	8.5	A-1	A	No

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
4852	212	244-220-02	320	~~151.66~~168.34	KCGP	8.5, 8.5/2.4	8.5, 8.5/2.4	A-1	A	No
~~49~~53	212	244-233-05	60	60	KCGP	8.5, 8.5/2.4	8.5, 8.5/2.4	A-1	A	No
~~50~~54	212	244-233-06	20	20	KCGP	3.3	8.5	A-1	A	No
~~51~~55	212	244-233-07	20	20	KCGP	8.5	8.5	A-1	A	No
~~52~~56	212	244-233-09	20	20	KCGP	8.5	8.5	A-1	A	No
~~53~~57	212	244-233-10	20	20	KCGP	8.5	8.5	A-1	A	No
~~54~~58	212	244-233-11	60	60	KCGP	8.5	8.5	A-1	A	No
~~55~~59	212	244-233-12	36.12	36.12	KCGP	8.5	8.5	A-1	A	No
~~56~~60	212	244-233-13	~~16.3~~15.72	~~16.3~~15.72	KCGP	8.5, 8.5/2.4	8.5, 8.5/2.4	A-1	A	No
~~57~~61	212	244-233-14	15.72	15.72	KCGP	8.5, 8.5/2.4	8.5, 8.5/2.4	A-1	A	No
~~58~~62	212	244-233-15	32.44	32.44	KCGP	8.5	8.5	A-1	A	No
~~59~~63	212	244-233-16	480	480	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~60~~64	212	244-233-17	160	~~137.5~~139.4	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~61~~65	212	244-421-01	159.89	152.97	KCGP	3.3, 3.3/2.4	8.5, 8.5/2.4	A-1	A	No
~~62~~66	212	244-421-02	7.48	7.48	KCGP	8.5/2.5	8.5/2.5	A-1	A	7.48
~~63~~67	212	244-421-03	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
6468	212	244-421-04	9.98	9.98	KCGP	8.5	8.5	A-1	A	No
~~65~~69	212	244-421-06	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~66~~70	212	244-421-07	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~67~~71	212	244-421-08	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~68~~72	212	244-421-09	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~69~~73	212	244-421-11	~~10~~9.98	~~10~~9.98	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~70~~74	212	244-421-17	10	10	KCGP	8.5	8.5	A-1	A	No
~~71~~75	212	244-421-18	10	10	KCGP	8.5	8.5	A-1	A	No
~~72~~76	212	244-421-19	10	10	KCGP	8.5	8.5	A-1	A	No
~~73~~77	212	244-421-24	9.99	9.99	KCGP	8.5	8.5	A-1	A	No
~~74~~78	212	244-421-25	2.59	2.59	KCGP	8.5	8.5	A-1	A	No
~~75~~79	212	244-421-26	2.59	2.59	KCGP	8.5	8.5	A-1	A	No

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
~~76~~80	212	244-421-27	2.59	2.59	KCGP	8.5	8.5	A-1	A	No
~~77~~81	212	244-421-28	2.59	2.59	KCGP	8.5	8.5	A-1	A	2.59
~~78~~82	212	244-421-29	2.59	2.59	KCGP	8.5	8.5	A-1	A	2.59
~~79~~83	212	244-421-30	2.59	2.59	KCGP	8.5	8.5	A-1	A	No
~~80~~84	212	244-421-31	2.58	2.58	KCGP	8.5	8.5	A-1	A	No
8185	212	244-421-32	2.58	2.58	KCGP	8.5	8.5	A-1	A	No
~~82~~86	212	244-421-33	2.59	2.59	KCGP	8.5	8.5	A-1	A	No
~~83~~87	212	244-421-34	2.59	2.59	KCGP	8.5	8.5	A-1	A	No
~~84~~88	212	244-421-35	2.59	2.59	KCGP	8.5	8.5	A-1	A	No
8589	212	244-421-36	2.59	2.59	KCGP	8.5	8.5	A-1	A	No
8690	212	244-421-37	2.5	2.5	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~87~~91	212	244-421-38	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~88~~92	212	244-421-39	2.5	2.5	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~89~~93	212	244-421-40	2.5	2.5	KCGP	8.5/2.5	8.5/2.5	A-1	A	No
~~90~~94	212	244-421-41	2.49	2.49	KCGP	8.5	8.5	A-1	A	No
~~91~~95	212	244-421-42	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~92~~96	212	244-421-43	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~93~~97	212	244-421-44	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~94~~98	212	244-421-45	2.59	2.59	KCGP	8.5/2.5	8.5/2.5	A-1	A	No
~~95~~99	212	244-421-46	2.59	2.59	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~96~~100	212	244-421-47	2.59	2.59	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~97~~101	212	244-421-48	2.59	2.59	KCGP	8.5/2.5	8.5/2.5	A-1	A	No
~~98~~102	212	244-421-49	2.6	2.6	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~99~~103	212	244-421-50	2.6	2.6	KCGP	8.5/2.5	8.5/2.5	A-1	A	No
~~100~~104	212	244-421-51	2.6	2.6	KCGP	8.5	8.5	A-1	A	No
~~101~~105	212	244-421-52	~~2.56~~2.59	~~2.56~~2.59	KCGP	8.5	8.5	A-1	A	No
~~102~~106	212	244-421-53	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
103107	212	244-421-54	2.5	2.5	KCGP	8.5	8.5	A-1	A	No

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
~~104~~108	212	244-421-55	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~105~~109	212	244-421-56	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~106~~110	212	244-431-01	20	20	KCGP	8.5	8.5	A-1	A	No
~~107~~111	212	244-431-02	10	10	KCGP	8.5	8.5	A-1	A	No
~~108~~112	212	244-431-03	10	10	KCGP	8.5	8.5	A-1	A	No
~~109~~113	212	244-431-04	10	10	KCGP	8.5	8.5	A-1	A	No
~~110~~114	212	244-431-05	10	10	KCGP	8.5	8.5	A-1	A	No
~~111~~115	212	244-431-06	20	20	KCGP	8.5	8.5	A-1	A	No
116	212	244-431-07	20.00	20.00	KCGP	8.5;2.5	8.5;2.5	A-1	A	No
112117	212	244-431-08	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~113~~118	212	244-431-09	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~114~~119	212	244-431-10	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~115~~120	212	244-431-11	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
121	212	244-431-12	20.00	20.00	KCGP	8.5	8.5	A-1	A	No
~~116~~122	212	244-432-33	20	20	KCGP	8.5	8.5	A-1	A	No
~~117~~123	212	244-432-35	10	10	KCGP	5.7	8.5	A-1	A	No
~~118~~124	212	244-432-36	10	10	KCGP	8.5	8.5	A-1	A	No
~~119~~125	212	244-432-37	40	40	KCGP	8.5	8.5	A-1	A	No
126	212	244-451-07	10.00	10.00	KCGP	8.5	8.5	A-1	A	10.00
~~120~~127	212	244-451-09	40	40	KCGP	8.5	8.5	A-1	A	No
128	212	244-451-10	2.50	2.50	KCGP	8.5	8.5	A-1	A	2.50
129	212	244-451-12	2.50	2.50	KCGP	8.5	8.5	A-1	A	2.50
130	212	244-451-25	2.50	2.50	KCGP	8.5	8.5	A-1	A	2.50
131	212	244-451-26	2.50	2.50	KCGP	8.5	8.5	A-1	A	2.50
132	212	244-452-04	5.00	5.00	KCGP	8.5	8.5	A-1	A	5.00
~~121~~133	212	244-452-05	10	10	KCGP	8.5	8.5	A-1	A	No
~~122~~134	212	244-452-06	10	10	KCGP	8.5	8.5	A-1	A	No
~~123~~135	212	244-452-07	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
~~124~~136	212	244-452-08	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
137	212	244-452-09	1.25	1.25	KCGP	8.5	8.5	A-1	A	1.25
138	212	244-452-10	1.25	1.25	KCGP	8.5;2.5	8.5;2.5	A-1	A	1.25
139	212	244-452-11	1.25	1.25	KCGP	8.5; 2.5	8.5; 2.5	A-1	A	1.25
140	212	244-452-12	1.25	1.25	KCGP	8.5	8.5	A-1	A	1.25
141	212	244-452-13	1.25	1.25	KCGP	8.5	8.5	A-1	A	1.25
142	212	244-452-14	1.25	1.25	KCGP	8.5	8.5	A-1	A	1.25
143	212	244-452-15	1.25	1.25	KCGP	8.5; 2.5	8.5; 2.5	A-1	A	1.25
144	212	244-452-16	1.25	1.25	KCGP	8.5; 2.5	8.5; 2.5	A-1	A	1.25
145	212	244-452-27	2.50	2.50	KCGP	8.5	8.5	A-1	A	2.50
146	212	244-452-28	2.50	2.50	KCGP	8.5	8.5	A-1	A	2.50
~~125~~147	212	244-453-01	10	10	KCGP	8.5	8.5	A-1	A	No
~~126~~148	212	244-453-02	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~127~~149	212	244-453-03	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~128~~150	212	244-453-04	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~129~~151	212	244-453-05	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~130~~152	212	244-453-06	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~131~~153	212	244-453-07	10	10	KCGP	8.5	8.5	A-1	A	No
~~132~~154	212	244-453-08	2.57	2.57	KCGP	8.5	8.5	A-1	A	No
~~133~~155	212	244-453-09	2.57	2.57	KCGP	8.5	8.5	A-1	A	No
~~134~~156	212	244-453-10	2.57	2.57	KCGP	8.5	8.5	A-1	A	No
~~135~~157	212	244-453-11	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~136~~148	212	244-453-12	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~137~~159	212	244-453-13	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~138~~160	212	244-453-14	10	10	KCGP	8.5, 8.5/2.5	8.5, 8.5/2.5	A-1	A	No
~~139~~161	212	244-454-01	10	10	KCGP	8.5	8.5	A-1	A	No
~~140~~162	212	244-454-02	10	10	KCGP	8.5	8.5	A-1	A	No
~~141~~163	212	244-454-03	2.57	2.57	KCGP	8.5	8.5	A-1	A	No

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
~~142~~164	212	244-454-04	2.57	2.57	KCGP	8.5	8.5	A-1	A	No
~~143~~165	212	244-454-05	2.57	2.57	KCGP	8.5	8.5	A-1	A	No
~~144~~166	212	244-454-06	2.57	2.57	KCGP	8.5	8.5	A-1	A	No
~~145~~167	212	244-454-07	10	10	KCGP	8.5	8.5	A-1	A	No
~~146~~168	212	244-454-08	5	5	KCGP	8.5	8.5	A-1	A	No
~~147~~169	212	244-454-09	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~148~~170	212	244-454-10	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~149~~171	212	244-454-11	10	10	KCGP	8.5	8.5	A-1	A	No
~~150~~172	212	244-454-12	2.56	2.56	KCGP	8.5	8.5	A-1	A	No
~~151~~173	212	244-454-13	2.56	2.56	KCGP	8.5	8.5	A-1	A	No
~~152~~174	212	244-454-14	2.56	2.56	KCGP	8.5	8.5	A-1	A	No
~~153~~175	212	244-454-15	2.56	2.56	KCGP	8.5	8.5	A-1	A	No
~~154~~176	212	244-454-16	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~155~~177	212	244-454-17	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~156~~178	212	244-454-19	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
~~157~~179	212	244-454-21	2.5	2.5	KCGP	8.5	8.5	A-1	A	No
CUP 7, MAP 212 TOTALS:			~~2344.0~~ 2423.77	~~2146.29~~2244.99						~~12.66~~52.66
CUP 24, MAP 197 Proposed Switchyard										
~~158~~180	197	237-332-15	10	10	KCGP	8.5	8.5	A-1	A	10
~~159~~181	197	237-332-16	5	5	KCGP	8.5	8.5	A-1	A	5
160182	197	237-332-17	5	5	KCGP	8.5	8.5	A-1	A	5
~~161~~183	197	237-332-18	9.82	~~5.3~~4.6	KCGP	8.5	8.5	A-1	A	9.82
~~162~~184	197	237-332-19	5	~~4.1~~4.5	KCGP	8.5	8.5	A-1	A	5
TOTALS:			34.82	~~29.4~~29.1						34.82
Off-Site Parcels										
CUP 5, Map 195 Temporary Offsite Laydown Yard										
163185	195	235-134-14	41.62	~~17.4~~25.08	KCGP	8.5	8.5	A-1	A	No
ZCC 5, Map 212 Water Storage Area										

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~~164~~186	212	244-234-03	~~20.26~~20.00	N/A	KCGP	8.5	8.5	A-1	A	No
Infrastructure Corridor										
187	212	244-451-01	2.50	0.00	KCGP	8.5	8.5	A-1	A	2.50
188	212	244-451-02	7.50	0.00	KCGP	8.5; 2.4	8.5; 2.4	A-1	A	7.50
189	212	244-451-03	2.50	0.00	KCGP	8.5	8.5	A-1	A	2.50
190	212	244-451-04	2.50	0.00	KCGP	8.5	8.5	A-1	A	2.50
191	212	244-451-05	2.50	0.00	KCGP	8.5	8.5	A-1	A	2.50
192	212	244-451-06	2.50	0.00	KCGP	8.5; 2.4	8.5; 2.4	A-1	A	2.50
193	212	244-452-01	5.00	0.00	KCGP	8.5	8.5	A-1	A	5.00
194	212	244-452-02	2.50	0.00	KCGP	8.5	8.5	A-1	A	2.50
195	212	244-452-17	1.25	0.00	KCGP	8.5;2.5	8.5;2.5	A-1	A	1.25
196	212	244-452-18	1.25	0.00	KCGP	8.5	8.5	A-1	A	1.25
197	212	244-452-19	1.25	0.00	KCGP	8.5	8.5	A-1	A	1.25
198	212	244-452-20	1.25	0.00	KCGP	8.5	8.5	A-1	A	1.25
199	212	244-452-21	1.25	0.00	KCGP	8.5	8.5	A-1	A	1.25
200	212	244-452-25	2.50	0.00	KCGP	8.5	8.5	A-1	A	2.50
201	196	428-030-32	18.76	0.00	Mojave	4.1	4.1	A-1	A-1	No
202	196	428-174-16	7.50	0.00	Mojave	4.1	4.1	A-1	A-1	No
203	196	428-174-17	2.5	0.00	Mojave	4.1	4.1	A-1	A-1	No
204	196	428-174-18	5.00	0.00	Mojave	4.1	4.1	A-1	A-1	No
205	196	428-174-29	5.00	0.00	Mojave	4.1	4.1	A-1	A-1	No
206	196	428-174-33	20.00	0.00	Mojave	4.1	4.1	A	A	No
207	196	428-201-16	33.00	0.00	Mojave	4.1; 2.5	4.1; 2.5	A-1 FPS	A-1 FPS	No
208	196	428-202-07	5.00	0.00	Mojave	4.1	4.1	A-1	A-1	No
209	196	428-202-41	9.24	0.00	Mojave	4.1	4.1	A-1 FPS	A-1 FPS	No
Gen-Tie Line (new)										
~~165~~210	195	235-132-13	157.27	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~166~~211	195	235-132-52	2.73	N/A	KCGP	8.5	8.5	A-1	A-1	No

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
~~167~~212	195	235-212-20	9.32	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~168~~213	195	235-212-21	9.32	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~169~~214	195	235-213-01	2.16	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~170~~215	195	235-213-10	2.16	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~171~~216	195	235-213-14	7.16	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~172~~217	195	235-213-17	2.16	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~173~~218	196	428-030-05	120	N/A	Mojave	8.5	8.5	A-1, A-1 H	A-1, A-1 H	No
~~174~~219	196	428-172-10	160	N/A	Mojave	8.5	8.5	A-1, A-1 H	A-1, A-1 H	No
~~175~~220	196	428-173-01	120	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~176~~221	196	428-173-04	2.5	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~177~~222	196	428-173-05	2.56	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~178~~223	196	428-173-06	10	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~179~~224	196	428-173-07	2.56	N/A	Mojave	8.5	8.5	A-1	A-1	
~~180~~225	196	428-173-08	2.56	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~181~~226	196	428-173-11	10	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~182~~227	196	428-174-16	7.5	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~183~~228	196	428-174-17	2.5	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~184~~229	196	428-174-18	5	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~185~~230	196	428-174-29	5	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~186~~231	196	428-174-33	20	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~187~~232	196	428-174-35	10	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~188~~233	196	428-174-36	20	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~189~~234	196	428-200-02	0	N/A	Mojave	8.5,8.5/2.5	8.5,8.5/2.5	A-1, FPS	A-1, FPS	No
~~190~~235	196	428-201-16	33	N/A	Mojave	8.5,8.5/2.5	8.5,8.5/2.5	A-1, FPS	A-1, FPS	No
~~191~~236	196	428-202-07	5	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~192~~237	196	428-202-41	9.24	N/A	Mojave	8.5	8.5	A-1, FPS	A-1, FPS	No
~~193~~238	196	428-202-44	1.99	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~194~~239	196	428-202-45	2.5	N/A	Mojave	8.5	8.5	A-1	A-1	No

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
~~195~~240	196	428-202-40	3.72	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~196~~241	197	237-332-11	10	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~197~~242	197	237-114-04	2.64	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~198~~243	197	237-114-03	2.53	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~199~~244	197	237-114-06	2.52	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~200~~225	197	237-114-07	2.52	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~201~~226	197	237-114-10	2.52	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~202~~227	197	237-114-09	2.52	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~203~~228	197	237-114-16	2.52	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~204~~229	197	237-113-13	2.52	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~205~~230	197	237-113-14	2.52	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~206~~231	197	237-113-15	2.52	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~207~~232	197	237-113-16	2.11	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~208~~233	197	237-113-09	2.11	N/A	KCGP	8.5	8.5	PL RS	PL RS	No
~~209~~234	197	237-031-38	556.36	N/A	KCGP	8.5	8.5	A WE	A WE	No
~~210~~235	197	237-031-04	636.36	N/A	KCGP	8.4	8.4	A WE	A WE	No
~~211~~236	212	244-411-01	0	N/A	KCGP	8.5/2.4,8.5	8.5/2.4,8.5	A-1	A-1	No
~~212~~237	212	244-234-02	161.46	N/A	KCGP	8.5/2.4,8.5	8.5/2.4,8.5	A-1	A-1	No
~~213~~238	212	244-234-03	20	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~214~~239	212	244-234-16	10	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~215~~240	212	244-234-17	10	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~216~~241	212	244-234-29	5.05	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~217~~242	212	244-234-30	10.02	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~218~~243	212	244-234-32	20	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~219~~244	212	244-234-35	10.02	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~220~~245	213	429-030-02	320.17	N/A	Mojave	8.5/2.4, 8.5/2.5, 8.5	8.5/2.4, 8.5/2.5, 8.5	A-1, FPS	A-1, FPS	No
Alternate Gen-Tie Line (new)										

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
~~221~~246	195	235-132-16	591.92	N/A	KCGP	8.5/2.4,8.5	8.5/2.4,8.5	A-1	A-1	No
~~222~~247	195	235-132-56	5.25	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~223~~248	196	428-202-34	2.3	N/A	KCGP	8.5	8.5	A-1	A-1	No
~~224~~249	196	428-202-35	2.28	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~225~~250	196	428-202-36	2.27	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~226~~251	196	428-202-37	2.26	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~227~~252	196	428-202-38	2.29	N/A	Mojave	8.5	8.5	A-1	A-1	No
~~228~~253	196	428-202-39	3.66	N/A	Mojave	8.5	8.5	A-1	A-1	No
Medium-Voltage Transmission and Access Easement										
~~229~~254	195	235-401-17	10.23	N/A	KCGP	8.5	8.5	A-1	A-1	No
SCE/CPC Parcels - SCE Work Areas										
~~230~~255	197	237-032-38	88.69	N/A	KCGP	7.3	7.3	M-3	M-3	No
~~231~~256	197	237-032-39	225.34	N/A	KCGP	7.3	7.3	M-4	M-3	No

Note: No zone variances are requested for those parcels less than the minimum required size of 20 acres for which proposed Vesting Tentative Parcel Maps would resolve parcel size.

The project site is located within unincorporated Kern County and the administrative boundaries of the Kern County General Plan. The project, proposed as one singular project site, is subject to the provisions of the Kern County Zoning Ordinance and spans across Zone Maps 195, 197, and 212. As shown in **Table 3-2**, *Project Site and Surrounding Land Uses***,** the project site primarily consists of the A-1 (Limited Agriculture) zone district. Several parcels also contain Floodplain Secondary (FPS) or Heavy Agriculture (A-1 H) combining districts.

TABLE 3-2: PROJECT SITE AND SURROUNDING LAND USES

Area	Existing Land Use	Existing General/Specific Plan Map Code Designation[a]	Existing Zoning Classification[b]
Project Site	Generally undeveloped/vacant land, various named and unnamed dirt roads	3.3, 3.3/2.4, 3.3/2.5, 5.7, 8.5, 8.5/2.4, 8.5/2.5	A-1
North	Generally vacant/undeveloped land; Bellefield Solar Project (under construction)	1.2, 8.5, 8.5/2.5	A-1
East	Generally vacant/undeveloped land, BNSF Railway	1.1, 8.5, 8.5/2.5	A-1
South	Generally vacant/undeveloped land, solar development, Edwards Air Force Base	1.1	A-1
West	Generally vacant/undeveloped land, BNSF Railway, Enterprise Solar Project (under construction), rural residential properties.	5.7, 8.5, 4.1 (Low Density Residential)	A-1, A, E

[a] Kern County General Plan (KCGP) and Mojave Specific Plan (SP) Map Code Designation:
1.1 (State and Federal Land)
1.2 (Incorporated Cities)
2.4 (Steep Slope)
2.5 (Flood Hazard)
3.3 (Other Facilities)
4.1 (Accepted County Plan Areas)
5.7 (Minimum 5 Gross Acres/Unit)
8.5 (Resource Management, Min. 20 Acre)

[b] Kern County Zoning District:
A (Exclusive Agriculture); A-1 (Limited Agriculture); and E (Estate)

3.3 Applicant- Submitted Project Objectives

California Environmental Quality Act (CEQA) *Guidelines* Section 15124(b) requires that a project description include a clearly written statement of objectives. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits. The following are the applicant-submitted project objectives for the proposed project:

- Establish solar PV power-generation with energy storage facilities of sufficient size and configuration to produce and deliver reliable electricity in an economically feasible and commercially financeable manner that can be marketed to multiple California utility companies or other viable power purchasers.

- Provide Kern County and the State of California, as well as utilities, with a renewable energy source adjacent to other renewable) energy and infrastructure facilities that would assist in meeting obligations under several bills that collectively define California's Renewable Portfolio Standard Program, including Assembly Bill 32, the Global Warming Solutions Act, as amended by Senate Bill 32 in 2016 and Senate Bill 100. These bills call for 100 percent of all electricity sold in California to come from carbon-free resources by 2045, including 90 percent renewables by 2035 (Senate Bill 1020), while vehicles are simultaneously transitioned from internal combustion engines to zero-emission forms.
- Assist Kern County in promoting its role as the State's leading producer of renewable energy and assist California utilities in meeting their obligations under the California Public Utilities Commission's Energy Storage Framework and Design Program.
- Use proven and established PV and energy storage technology (if constructed) that is efficient, recyclable, and requires low maintenance.
- Maximize use of existing transmission infrastructure and transmission corridors, thereby minimizing new disturbance.
- Site and design the project in an environmentally responsible manner consistent with current Kern County guidelines, including:
    a. Locating generation facilities in areas which receive intense solar radiation;
    b. Using existing electrical transmission facilities, rights-of-way, roads, and other existing infrastructure where practical;
    c. Minimizing water use; and
    d. Reducing greenhouse gas emissions.
- Use construction techniques that minimize soil disturbance, allow water to continue to flow and percolate naturally across the project site, and avoid and minimize environmental impacts including impacts to air quality, noise, and water quality.
- Develop a solar PV power-generation and energy storage facility in Kern County which would support the economy by investing in the local community, provide green jobs to the County and California, and increase tax and fee revenue to the County.
- Supplement the California power grid due to the shutdown of nuclear power plants throughout the state.
- Expand the reach of renewable energy development through the development of battery energy storage systems (BESS; if constructed), making solar more valuable by storing energy and placing it on the grid after sunset.
- Utilize vacant land that has limited water availability for a renewable energy project.

3.4 Environmental Setting

The project site is generally undeveloped land in the Mojave Desert within the Antelope Valley in southeastern Kern County, California. The project site is in an area of low population density southeast of the Tehachapi Mountains and is traversed by a network of dirt roads. This portion of Kern County is

recognized by the National Renewable Energy Laboratory as having solar and wind resources that are suitable for renewable energy development.

The project site is located in the vicinity of renewable energy development (Sanborn Solar Project, Edwards Solar Project, Enterprise Solar Storage Project, and Bellefield Solar Project), Edwards AFB, rural residential development, industrial and mining uses, and undeveloped lands. Land managed by the Bureau of Land Management (BLM) is located immediately to the east but outside of the project site. Other specific developments within the region include the RE Columbia 2 and 3 Solar Projects, the RE Rio Grande Solar Project, and the RE Camelot Solar Project, numerous wind farms, the Mojave-Rosamond Landfill, and the Hyundai Motor Group California Proving Grounds. Renewable energy projects in the vicinity of the project site are included in **Figure 3-4**, *Surrounding Renewable Energy Projects*. An expanded list of existing, approved, and pending projects in the project vicinity is provided at the end of this chapter. Locations of renewable energy projects are available at https://kernplanning.com/planning/renewable-energy.

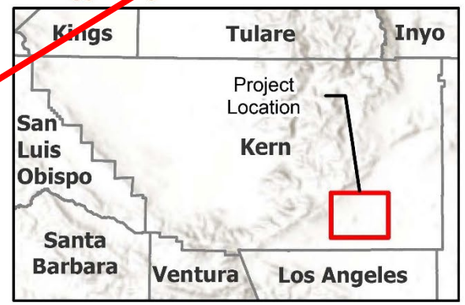
The closest sensitive receptor to the project site, on land not owned by the project proponent, is a residence located approximately one mile west at APN 429-152-21, in Section 12, Township 10 North, Range 12 West.

There are three existing residences within the project site on APNs 244-432-35, 244-432-37, and 244-233-10. These parcels have been acquired by the project proponent, and the existing structures will be demolished as part of project construction, in accordance with Kern County demolition permits and other applicable regulations.

Galaxy Solar PV & Storage Project

Kern County, CA

Figure 3-4. Surrounding Renewable Energy Projects



Solar Power Project

Wind Power Project

Approved California High- Speed Rail Statewide Alignment

California State Scenic Highway – Eligible

Proposed Project Features

Project Site

Collector Substation

Temporary Offsite Laydown Yard

SCE Potential Work Area

Proposed Gen-tie Line (New)

Alternate Gen-tie Line (New)

Other Applicant and/or Affiliate Controlled*

Gen-tie Corridor

*Already approved under separate projects.

N

0 1 2 4 Miles

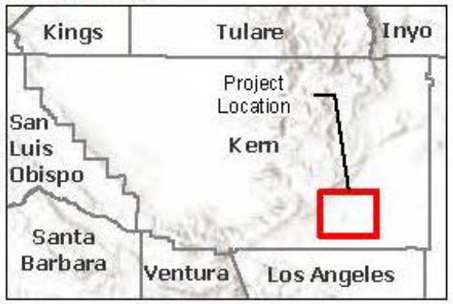
Scale is 1:100,000 when printed at 11"x17"

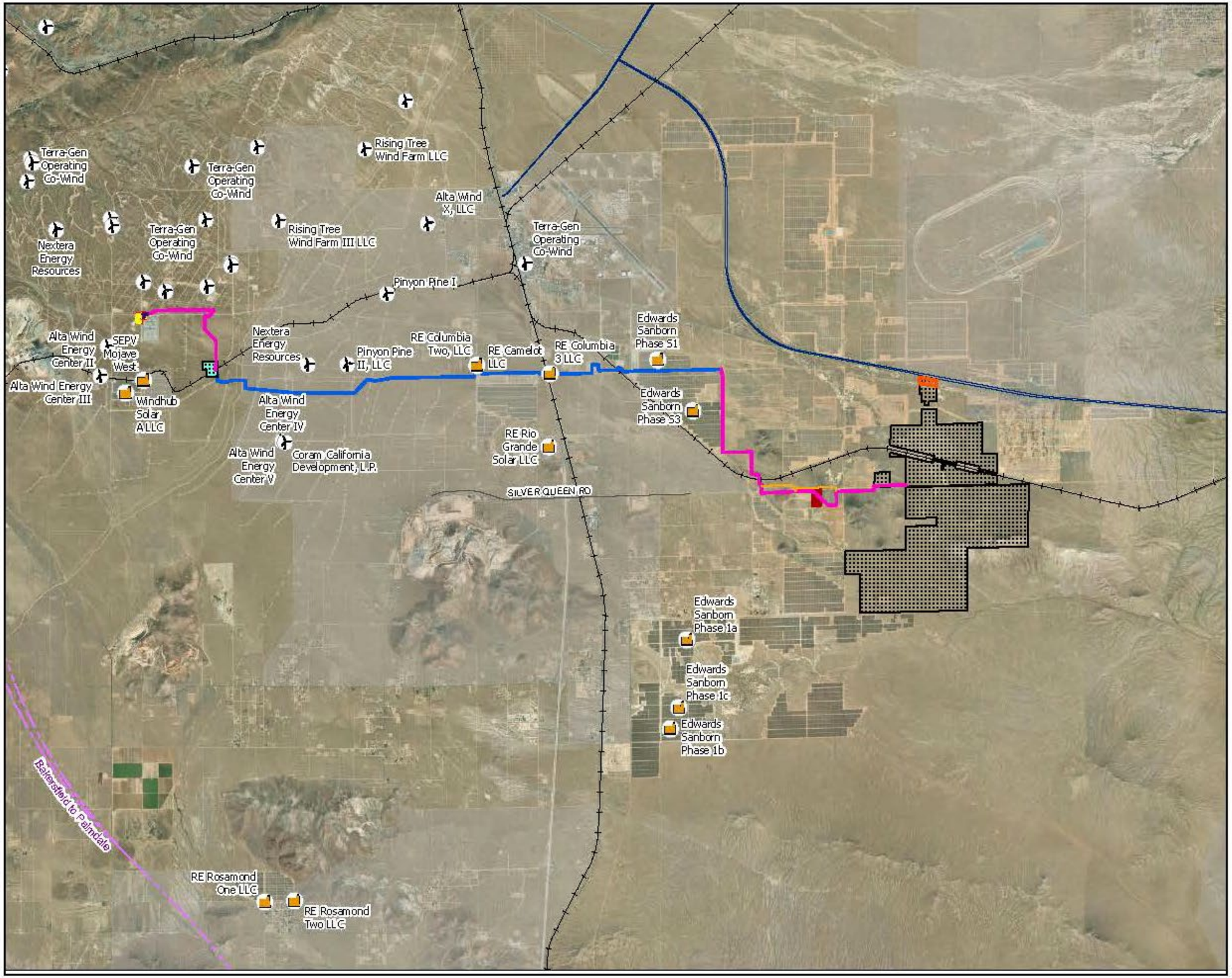
Not for Construction

Galaxy Solar PV & Storage Project

Kern County, CA

Figure 3-4. Surrounding Renewable Energy Projects





- Solar Power Project
- Wind Power Project
- Approved California High- Speed Rail Statewide Alignment
- California State Scenic Highway – Eligible

Proposed Project Features

- Project Site
- 230-kV Switchyard
- Offsite Water Storage Tank Area
- Interconnection
- SCE Work Areas
- Temporary Offsite Laydown Yard
- Proposed Gen-tie Line (New)
- Alternate Gen-tie Line (New)

Other Applicant and/or Affiliate Controlled*

- Gen-tie Corridor

*Already approved under separate projects.

N

0 1 2 4 Miles

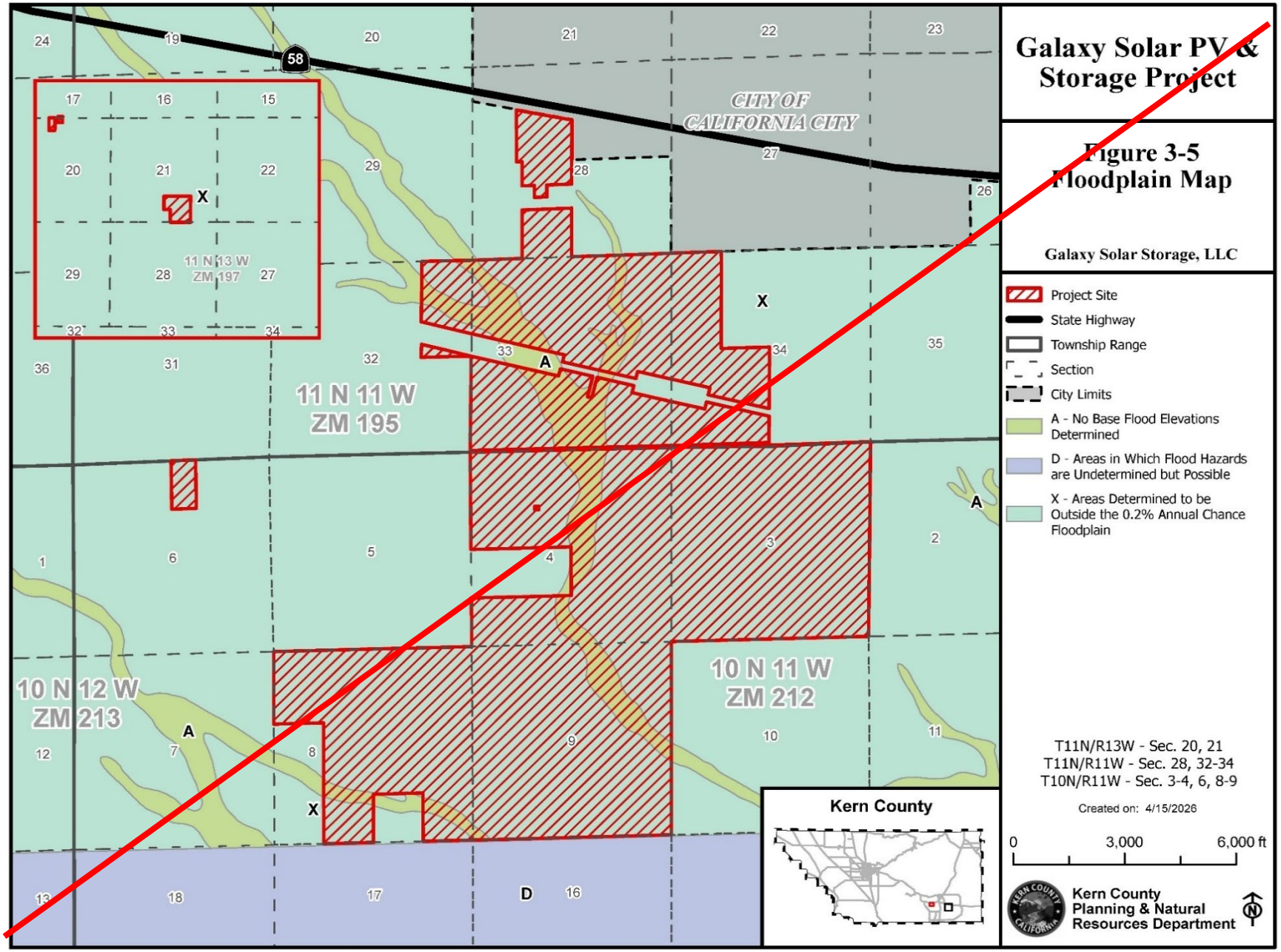
Scale is 1:100,000 when printed at 11"x17"

Not for Construction

As shown on **Figure 3-5**, *Floodplain Map*, a Federal Emergency Management Agency (FEMA)-designated flood zone, Flood Zone "A," spans a portion of the project site, indicating that this area could flood during a 100-year flood event. Project facilities located within a FEMA-designated flood zone would be designed to meet County requirements. All portions of the project site located outside of Flood Zone "A" are located within FEMA-designated Flood Zone "X," which indicates areas of minimal flood hazard. The project site has a relatively flat terrain with elevations ranging between 2,460 and 2,900 feet above mean sea level due to its location south of the Tehachapi Mountains, where lands gradually slope downward from the northwest towards the southeast. The project site is not identified as a wetland area on the National Wetlands Inventory.

The project would be served by the Kern County Sheriff's Office (KCSO) for law enforcement and public safety, Kern County Fire Department (KCFD) for fire protection, and Kern County Medical Emergency Service for emergency medical and rescue services. The nearest KCSO substation and KCFD fire station (Station No. 14) that would serve the project are both located in the community of Mojave. The nearest hospital is the Antelope Valley Medical Center at 1600 W Ave J in the City of Lancaster, which is approximately 20 miles to the southwest of the project site. The closest schools include Forbes Elementary School, Desert High School, Mojave Junior/Senior High School, and Joshua Middle School, located 6 miles, 6.3 miles, 7 miles, and 7.5 miles from the project site, respectively.

The Mojave Air & Space Port is located approximately 4.5 miles northwest of the project site. No portion of the project site is located within an area governed by the Kern County Airport Land Use Compatibility Plan (ALUCP); however, a portion of the proposed gen-tie route falls within the Airport Influence Area. The proposed project would be required to comply with the Kern County ALUCP.


Galaxy Solar PV & Storage Project
Figure 3-5
Floodplain Map
Galaxy Solar Storage, LLC
Project Site
State Highway
Township Range
Section
City Limits
A - No Base Flood Elevations Determined
D - Areas in Which Flood Hazards are Undetermined but Possible
X - Areas Determined to be Outside the 0.2% Annual Chance Floodplain
CITY OF CALIFORNIA CITY
11 N 11 W ZM 195
10 N 12 W ZM 213
10 N 11 W ZM 212
11 N 13 W ZM 197
58
Kern County
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
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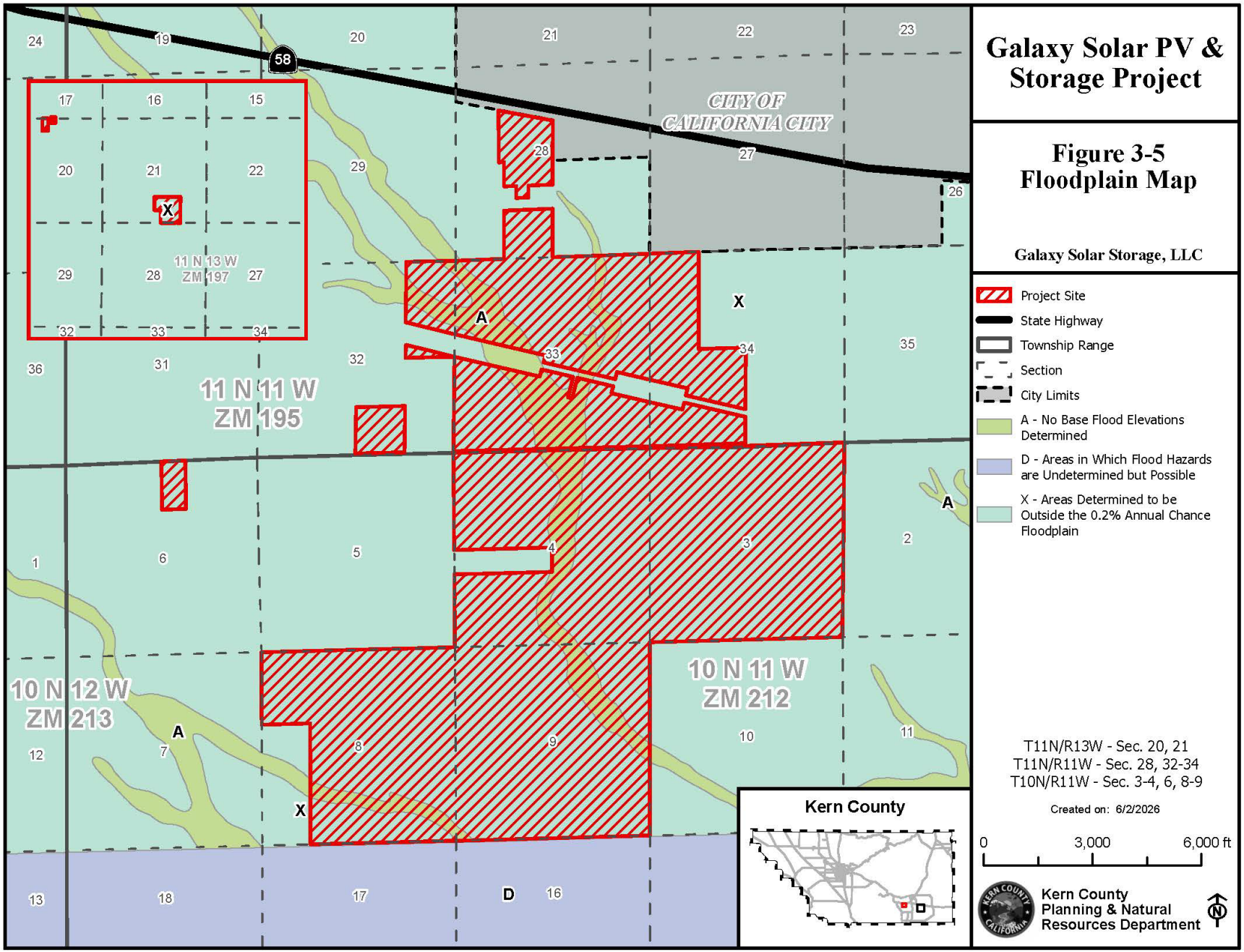
Galaxy Solar PV & Storage Project
Figure 3-5
Floodplain Map
Galaxy Solar Storage, LLC
Project Site
State Highway
Township Range
Section
City Limits
A - No Base Flood Elevations Determined
D - Areas in Which Flood Hazards are Undetermined but Possible
X - Areas Determined to be Outside the 0.2% Annual Chance Floodplain
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
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Kern County Planning & Natural Resources Department
Kern County
CITY OF CALIFORNIA CITY
11 N 13 W ZM 197
11 N 11 W ZM 195
10 N 12 W ZM 213
10 N 11 W ZM 212
58

3.5 Land Use and Zoning

The project site is governed by the Kern County General Plan. The entire project is subject to the provisions of the Kern County Zoning Ordinance. **Table 3-1**, *Project Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages*, identifies the existing land use, the existing general plan land use designation, and the existing zoning for the project site and surrounding areas.

Kern County General Plan

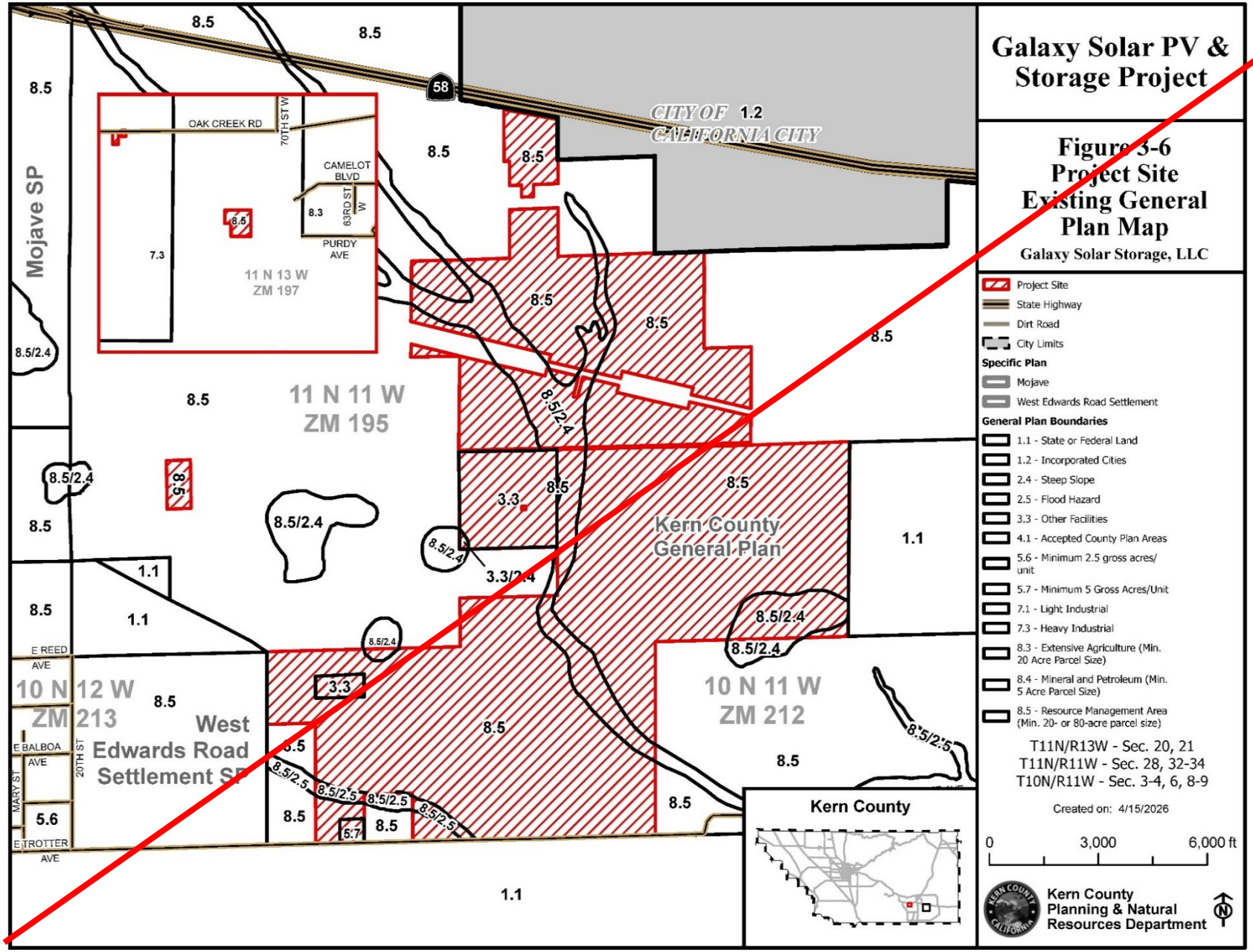
The project site is located within unincorporated Kern County and the boundaries of the Kern County General Plan. The existing General Plan designations are shown in **Figure 3-6**, *Project Site Existing General Plan Map,* and listed in **Table 3-1**, *Project Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages*. Proposed General Plan Amendments are depicted in **Figure 3-7**, *Proposed General Plan Map*.

Kern County Zoning Ordinance

The proposed project, proposed as one singular project site, is subject to the provisions of the Kern County Zoning Ordinance and spans across Zone Maps 195, 197, and 212. The project site consists of the A-1 (Limited Agriculture) zone district. The project proponent is seeking a ZCC to change the existing zoning on the project site to Exclusive Agriculture. Solar energy electrical generators are authorized within the Exclusive Agriculture zoning district with approval of a CUP.

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 the approval of a CUP. The existing and proposed zoning designations are as specified in **Table 3-1**, *Project Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages,* and depicted in **Figure 3-8**, *Existing Zoning Classifications,* and **Figure 3-9**, *Proposed Zone Classifications*.

The project site is sited directly north of the Edwards AFB and is within the Joint Service Restricted R-2508 Complex. This restricted airspace allows flying missions at the Edwards AFB and China Lake Naval Weapons Station to go beyond the boundaries of the installations and fly at lower elevations within the complex. Also, the Kern County Zoning Ordinance, Section 19.08.160, describes U.S. military review requirements for proposed structures exceeding certain heights and occurring within the vicinity of a military flight zone to ensure that projects within Kern County do not conflict with military flight test pathways.


Galaxy Solar PV & Storage Project
Figure 3-6
Project Site
Existing General Plan Map
Galaxy Solar Storage, LLC
Project Site
State Highway
Dirt Road
City Limits
Specific Plan
Mojave
West Edwards Road Settlement
General Plan Boundaries
1.1 - State or Federal Land
1.2 - Incorporated Cities
2.4 - Steep Slope
2.5 - Flood Hazard
3.3 - Other Facilities
4.1 - Accepted County Plan Areas
5.6 - Minimum 2.5 gross acres/ unit
5.7 - Minimum 5 Gross Acres/Unit
7.1 - Light Industrial
7.3 - Heavy Industrial
8.3 - Extensive Agriculture (Min. 20 Acre Parcel Size)
8.4 - Mineral and Petroleum (Min. 5 Acre Parcel Size)
8.5 - Resource Management Area (Min. 20- or 80-acre parcel size)
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
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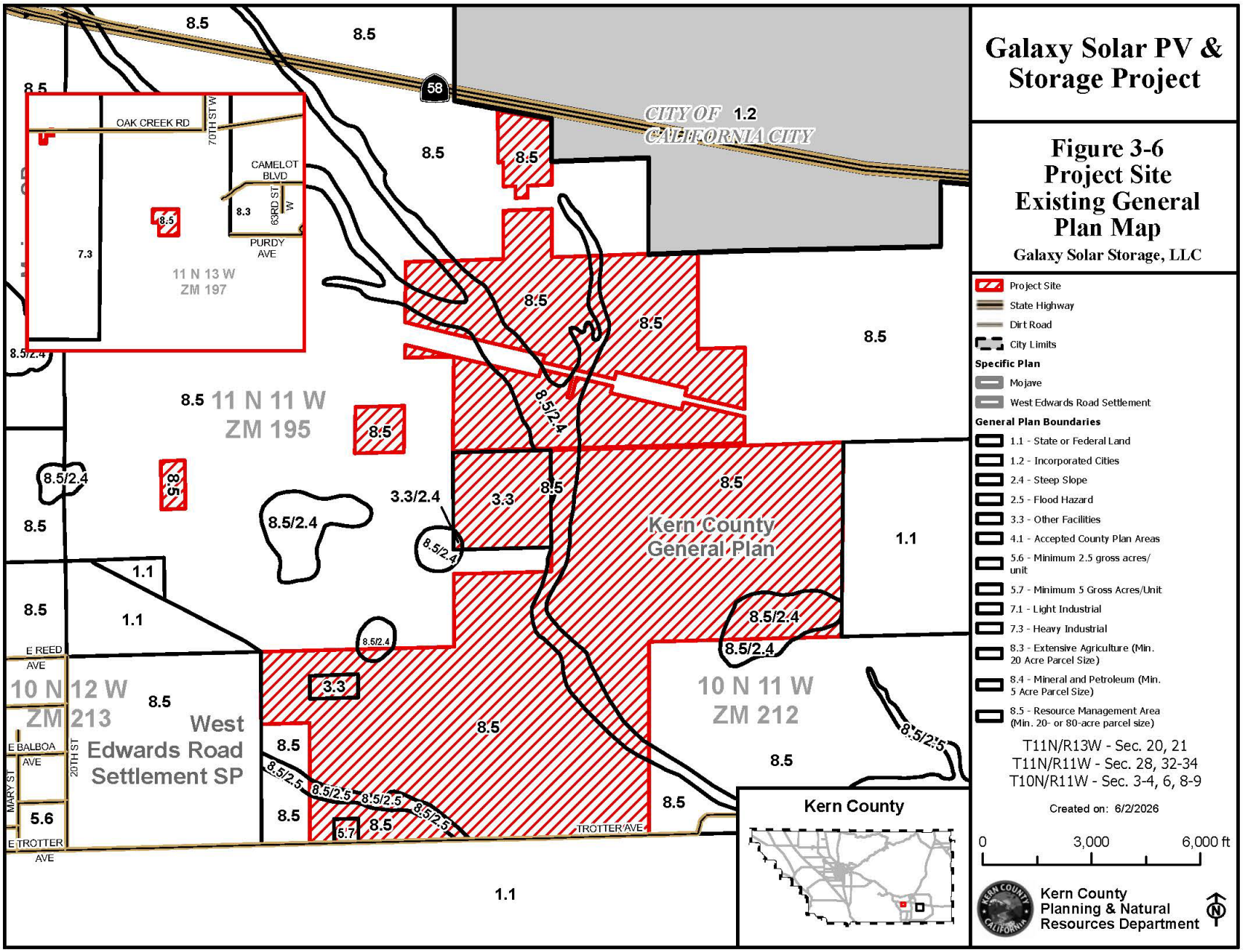
Kern County Planning & Natural Resources Department
Kern County
CITY OF CALIFORNIA CITY
Mojave SP
West Edwards Road Settlement SP
Kern County General Plan
11 N 13 W ZM 197
11 N 11 W ZM 195
10 N 12 W ZM 213
10 N 11 W ZM 212
OAK CREEK RD
CAMELOT BLVD
PURDY AVE
E REED AVE
E BALBOA AVE
E TROTTER AVE
70TH ST W
63RD ST W
20TH ST
MARY ST
58


Galaxy Solar PV & Storage Project
Figure 3-6
Project Site
Existing General Plan Map
Galaxy Solar Storage, LLC
Project Site
State Highway
Dirt Road
City Limits
Specific Plan
Mojave
West Edwards Road Settlement
General Plan Boundaries
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Kern County Planning & Natural Resources Department
Kern County
CITY OF CALIFORNIA CITY
Kern County General Plan
West Edwards Road Settlement SP
11 N 13 W ZM 197
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OAK CREEK RD
CAMELOT BLVD
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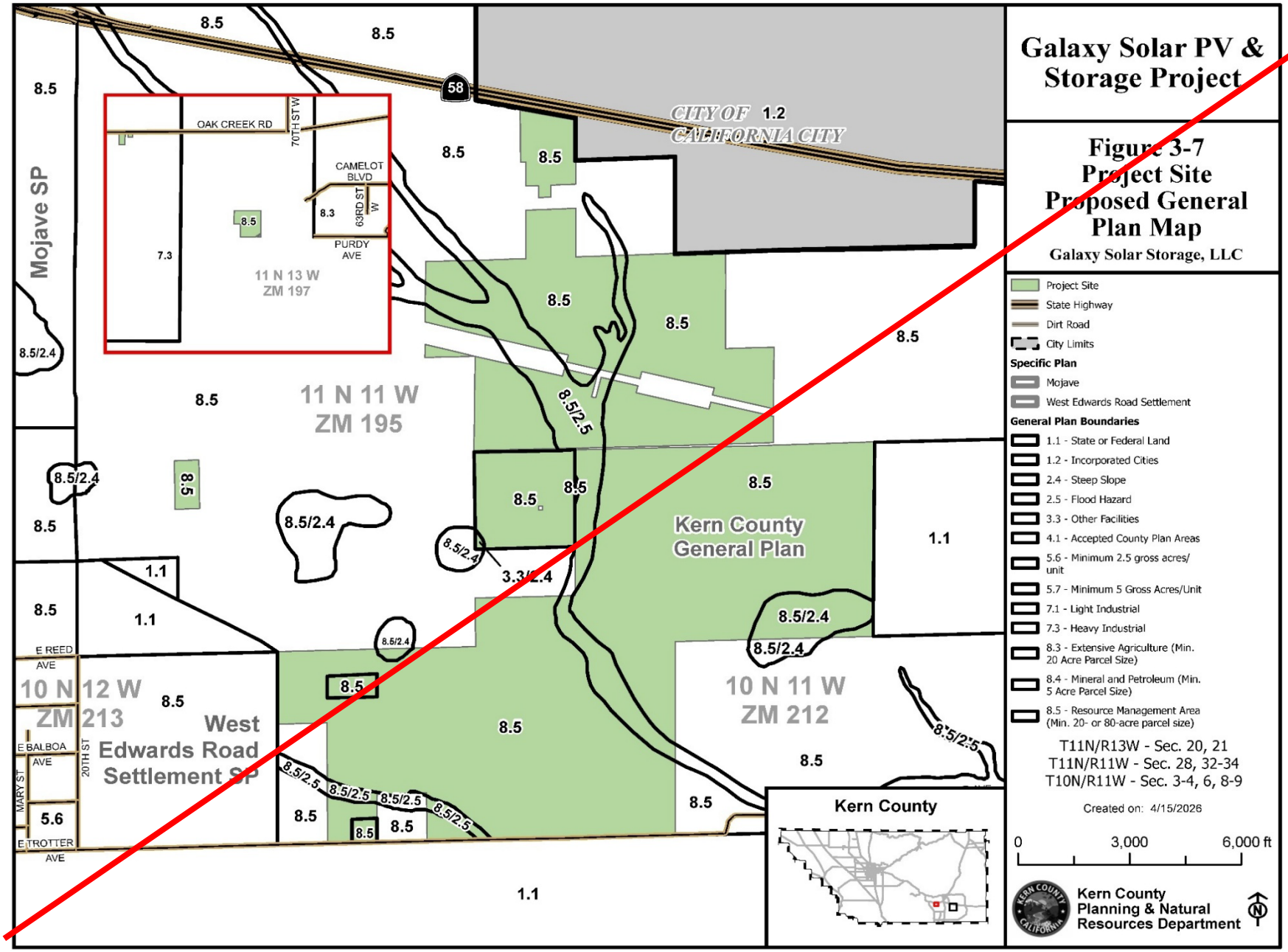
Galaxy Solar PV & Storage Project
Figure 3-7
Project Site
Proposed General Plan Map
Galaxy Solar Storage, LLC
Project Site
State Highway
Dirt Road
City Limits
Specific Plan
Mojave
West Edwards Road Settlement
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20TH ST
MARY ST
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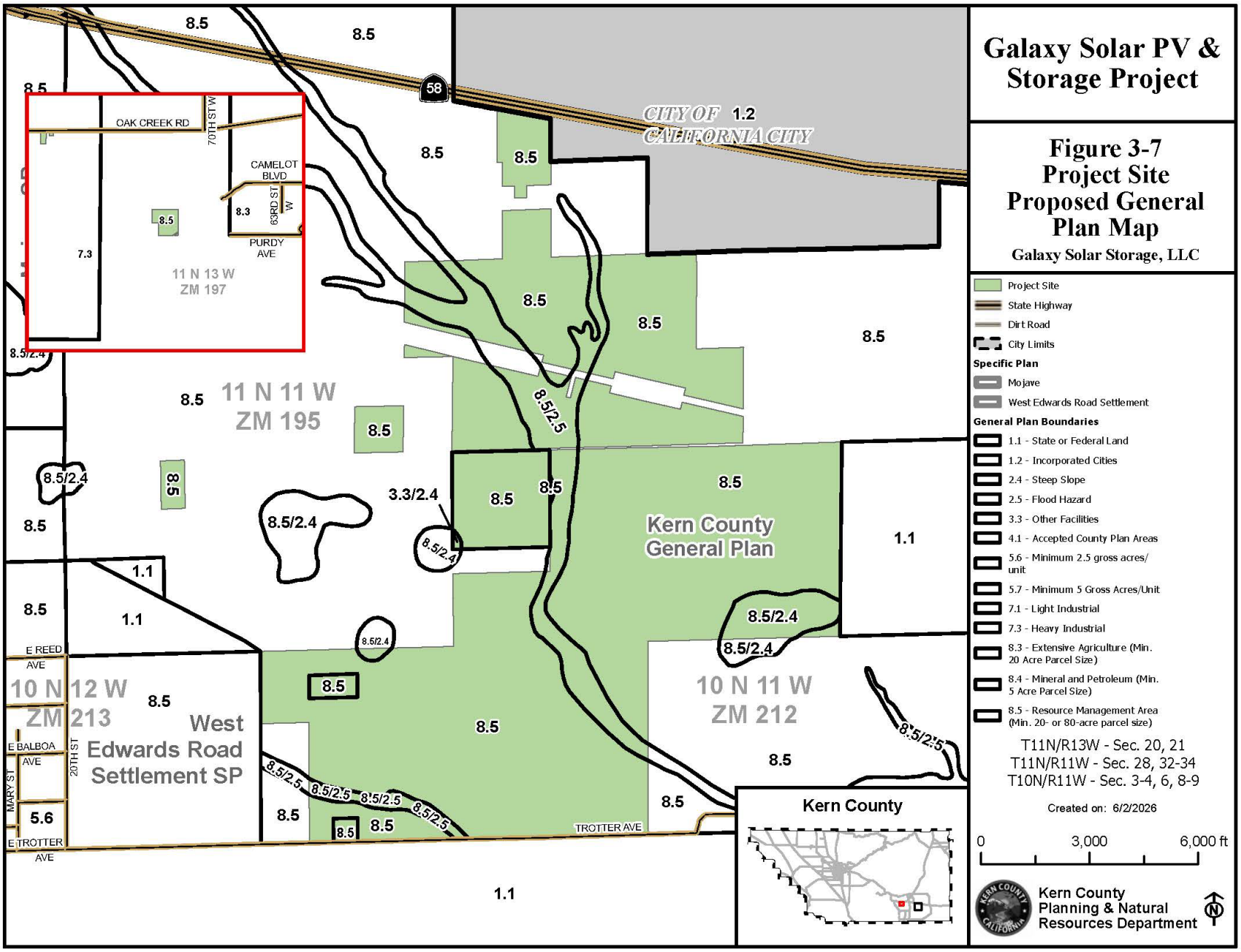
Galaxy Solar PV & Storage Project
Figure 3-7
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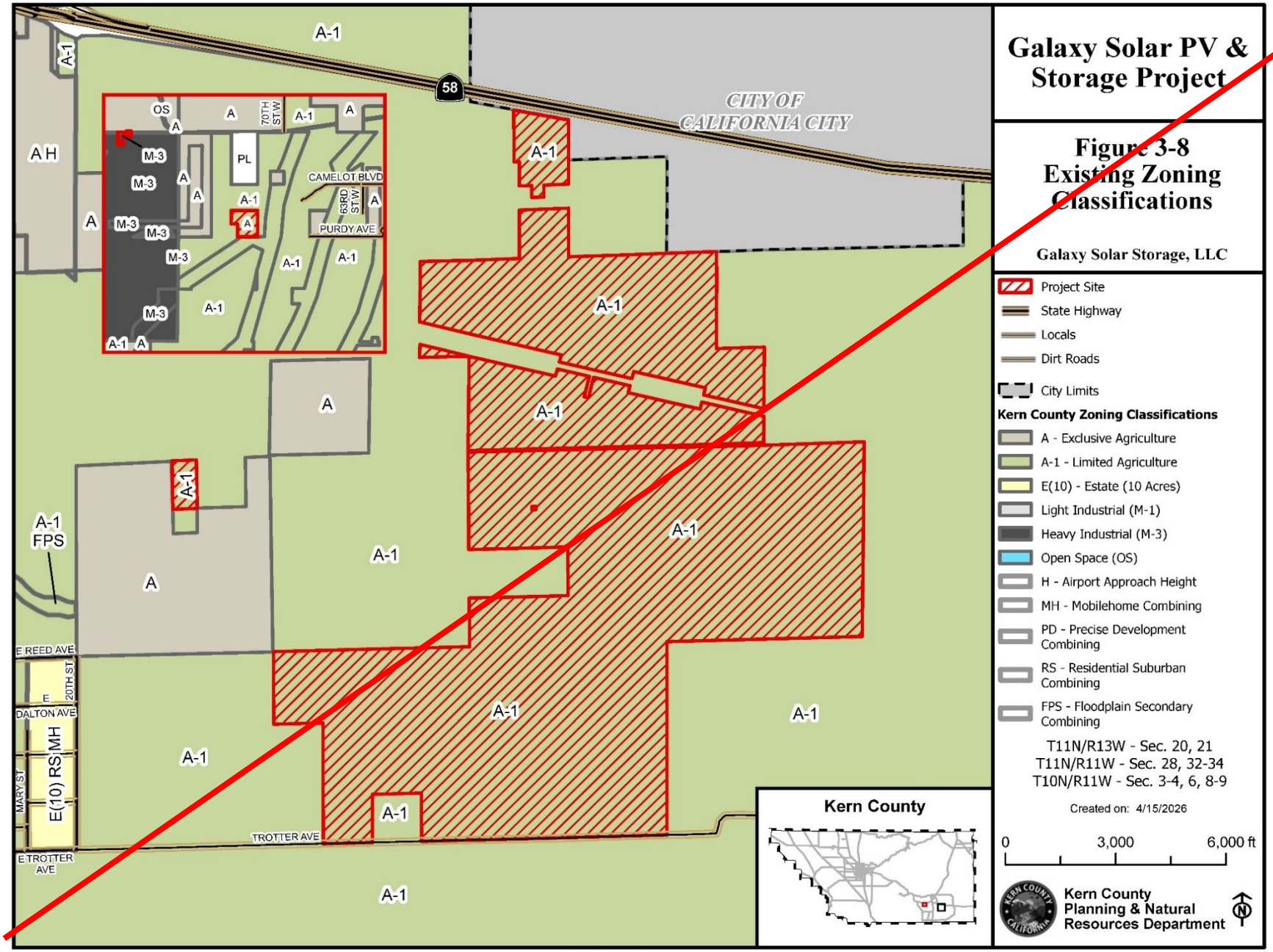
Galaxy Solar PV & Storage Project
Figure 3-8
Existing Zoning Classifications
Galaxy Solar Storage, LLC
Project Site
State Highway
Locals
Dirt Roads
City Limits
Kern County Zoning Classifications
A - Exclusive Agriculture
A-1 - Limited Agriculture
E(10) - Estate (10 Acres)
Light Industrial (M-1)
Heavy Industrial (M-3)
Open Space (OS)
H - Airport Approach Height
MH - Mobilehome Combining
PD - Precise Development Combining
RS - Residential Suburban Combining
FPS - Floodplain Secondary Combining
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
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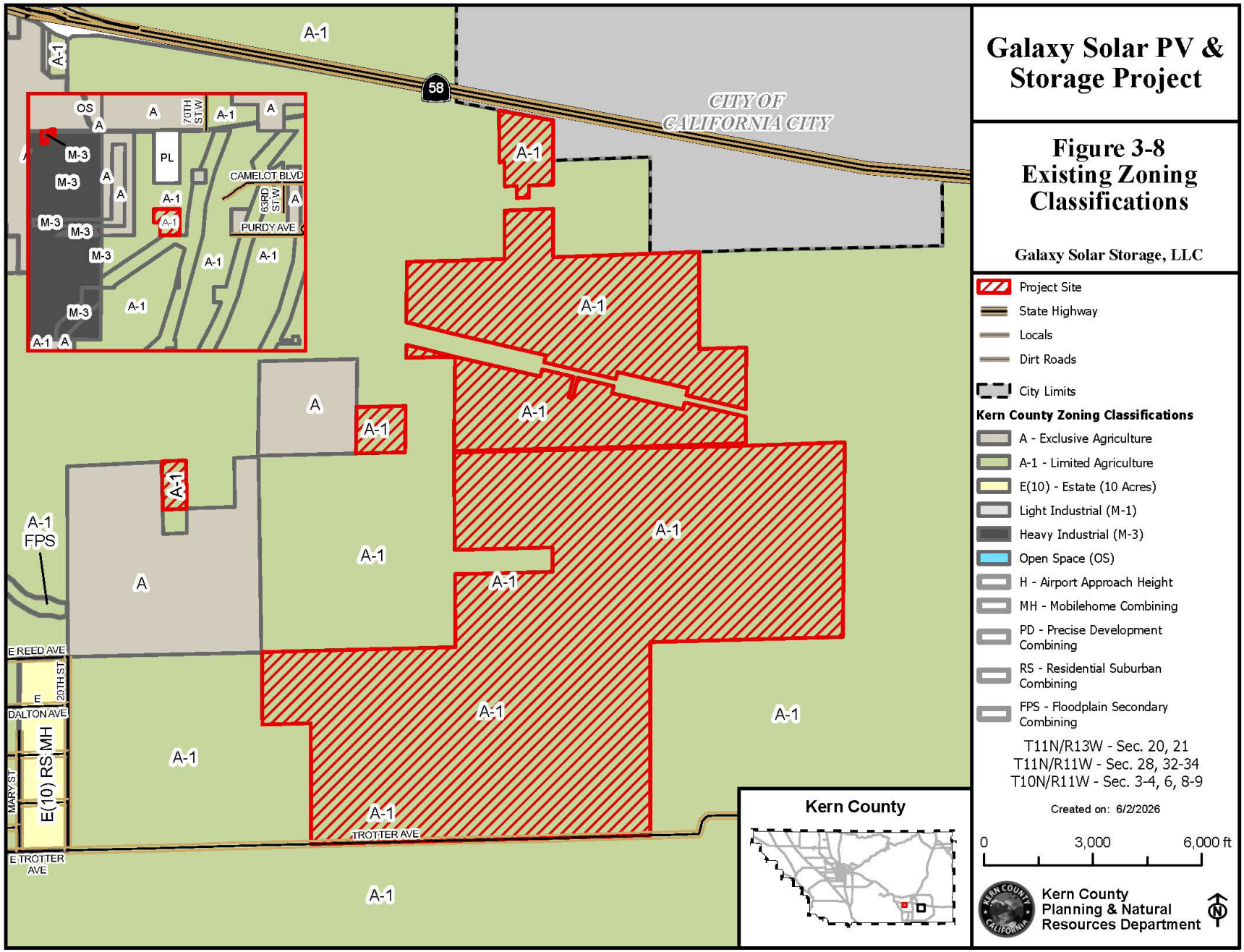
58
CAMELOT BLVD
PURDY AVE
70TH ST W
63RD ST W
E REED AVE
DALTON AVE
TROTTER AVE
E TROTTER AVE
MARY ST
20TH ST E
A-1 FPS
E(10) RS MH


Galaxy Solar PV & Storage Project
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Locals
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City Limits
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Light Industrial (M-1)
Heavy Industrial (M-3)
Open Space (OS)
H - Airport Approach Height
MH - Mobilehome Combining
PD - Precise Development Combining
RS - Residential Suburban Combining
FPS - Floodplain Secondary Combining
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
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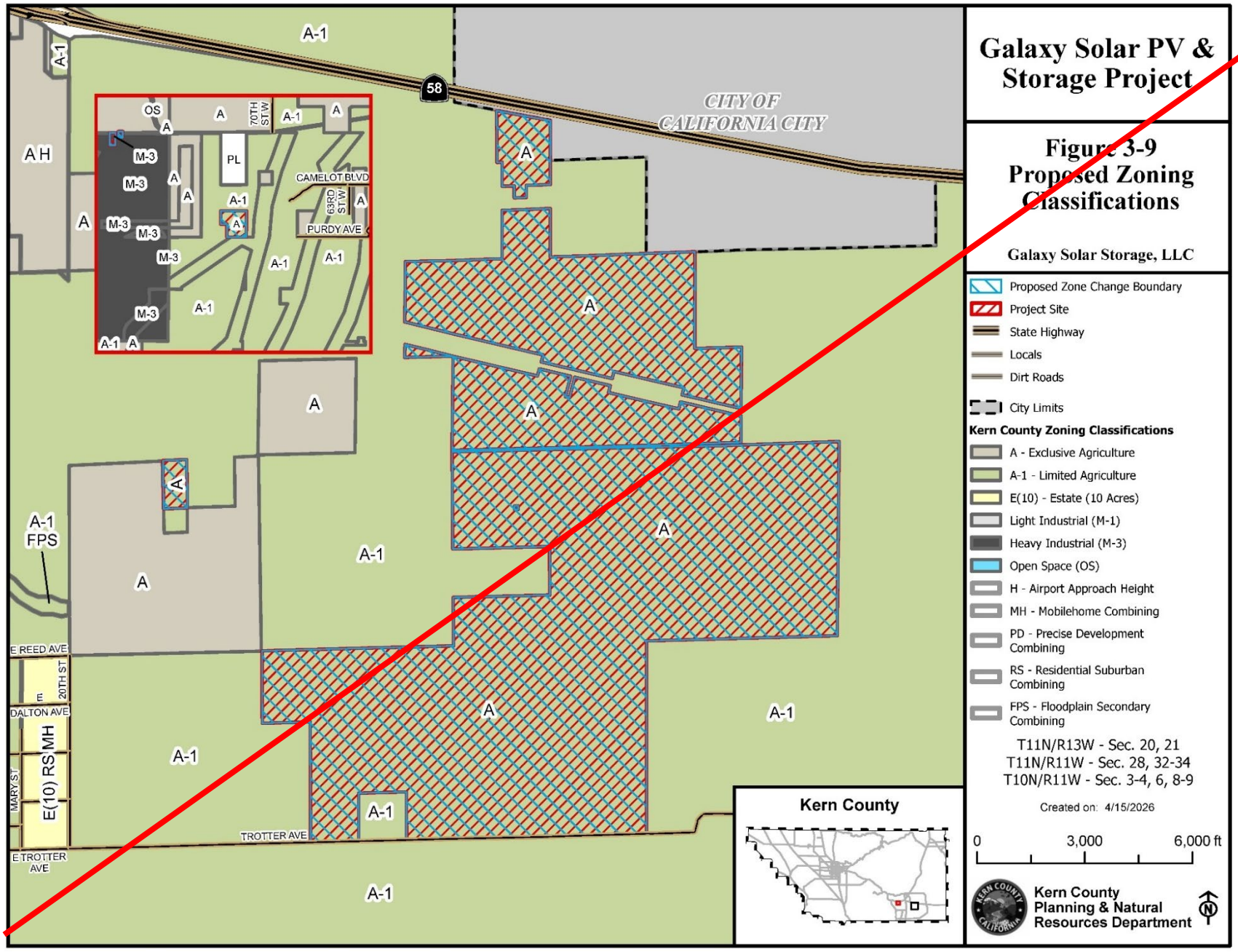
Kern County
Planning & Natural Resources Department
Kern County
CITY OF CALIFORNIA CITY
58
CAMELOT BLVD
PURDY AVE
70TH ST W
63RD ST W
E REED AVE
20TH ST
E DALTON AVE
MARY ST
E TROTTER AVE
TROTTER AVE
A-1 FPS
E(10) RS MH


Galaxy Solar PV & Storage Project
Figure 3-9
Proposed Zoning Classifications
Galaxy Solar Storage, LLC
Proposed Zone Change Boundary
Project Site
State Highway
Locals
Dirt Roads
City Limits
Kern County Zoning Classifications
A - Exclusive Agriculture
A-1 - Limited Agriculture
E(10) - Estate (10 Acres)
Light Industrial (M-1)
Heavy Industrial (M-3)
Open Space (OS)
H - Airport Approach Height
MH - Mobilehome Combining
PD - Precise Development Combining
RS - Residential Suburban Combining
FPS - Floodplain Secondary Combining
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
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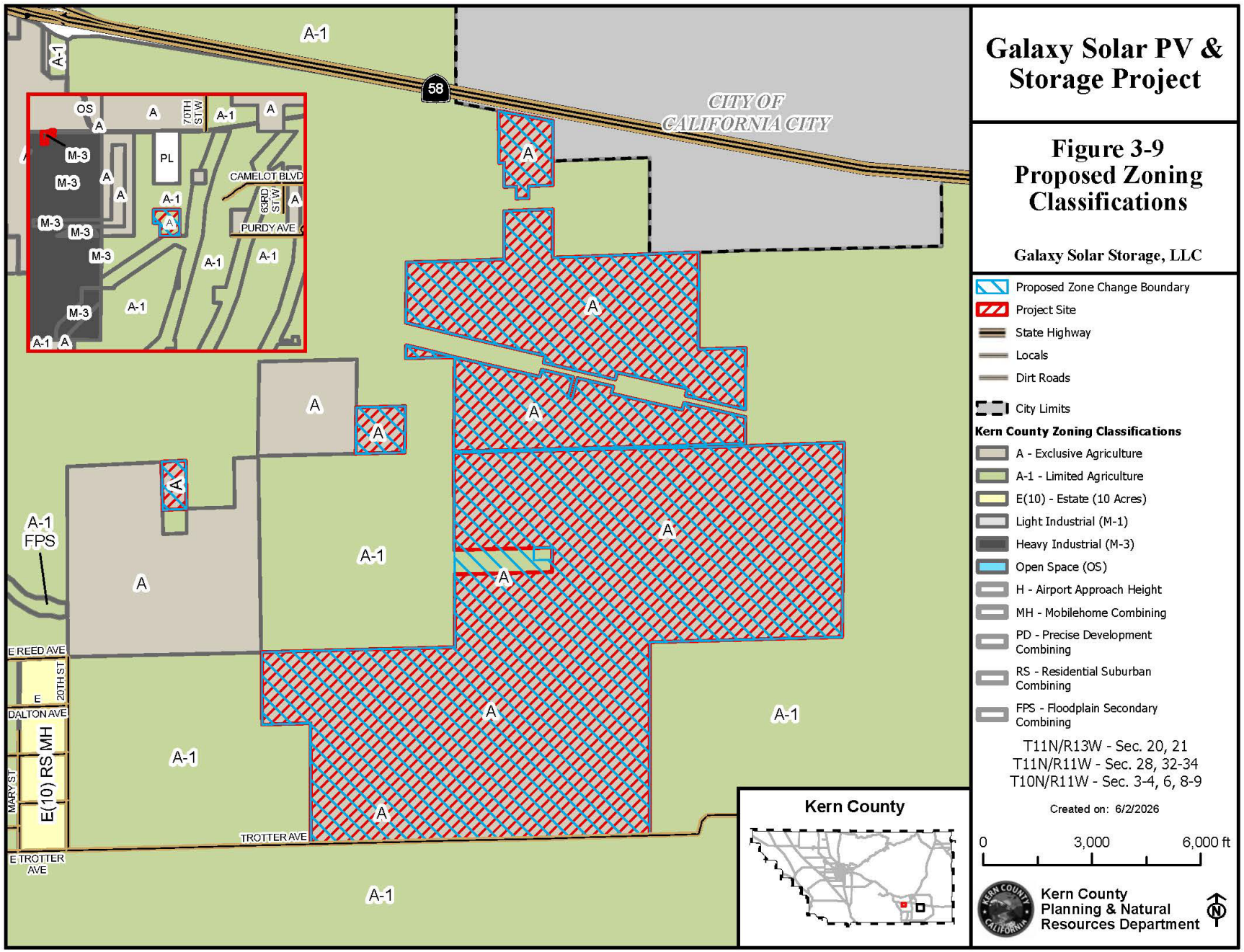
DALTON AVE
MARY ST
E TROTTER AVE
TROTTER AVE
E(10) RS MH
A-1 FPS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State Highway
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Open Space (OS)
H - Airport Approach Height
MH - Mobilehome Combining
PD - Precise Development Combining
RS - Residential Suburban Combining
FPS - Floodplain Secondary Combining
T11N/R13W - Sec. 20, 21
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Kern County
Planning & Natural Resources Department
Kern County
CITY OF CALIFORNIA CITY
58
CAMELOT BLVD
PURDY AVE
70TH ST W
63RD ST W
E REED AVE
E DALTON AVE
E TROTTER AVE
TROTTER AVE
20TH ST
MARY ST
E(10) RS MH
A-1 FPS

3.6 Project Description

The project includes the construction, operation, maintenance, and eventual decommissioning of an approximately 600-MW photovoltaic (PV) solar facility, which may include up to 4 GWh of energy storage capacity, on approximately ~~3,400~~3,519 acres across ~~162~~184 privately owned parcels in an unincorporated area of southeastern Kern County, California. In the event the project proponent does not develop energy storage within the areas illustrated in the proposed site plans, the project proponent would instead develop PV panels throughout the project site, but the total output (up to 600-MW) would not change. As shown in **Table 3-1**, *Project Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages,* additional offsite parcels are proposed for uses including: a temporary construction laydown yard, water storage tanks, an MV transmission and access easement, and SCE work area. The project would interconnect via gen-tie line facilities to the SCE Windhub Substation, as shown in **Figure 3-3,** *Proposed Site Plan.*

Infrastructure associated with the project would include PV solar generating facilities and solar modules, energy storage system(s), electrical collection system and inverters, an onsite collector substation, a 230kV switchyard, grid interconnection, telecommunication facilities, site access, and security, as described in further detail in **Section 3.7**, *Project Characteristics*. Primary access to the project site would be from the current mapped alignment of 45th Street via SR-58 with additional access from the current alignment of Silver Queen Road via United Street. Current legal access for all existing residences would be preserved and would not be hindered by the project.

Implementation of the project as proposed includes the following requests, also depicted on **Figures 3-7**, *Proposed General Plan Map* and **Figure 3-10**, *Proposed Project CUP and ZCC Boundaries*:

Zone Change

(a) Zone Classification Change No. 5, Map 195 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) on approximately ~~966.77~~1,007.00 acres;

(b) Zone Classification Change No. 4, Map 212 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) on approximately ~~2,344.05~~2,460.02 acres;

Conditional Use Permit

(a) Conditional Use Permit No. 4, Map 195, to allow for the construction and operation of a solar facility up to 150 MW and associated infrastructure, including energy storage, a switchyard, and temporary construction staging and equipment storage on approximately ~~966.77~~974.95 acres in an A (Exclusive Agriculture) District, pursuant to Chapter 19.12.030.G and 19.12.030K of the Kern County Zoning Ordinance.

(b) Conditional Use Permit No. 5, Map 195, to allow for a temporary construction laydown area on approximately ~~17.4~~25.08 acres of a 41.62 acre parcel, pursuant to Chapter 19.12.030.G and 19.12.030.K of the Kern County Zoning Ordinance.

(c) Conditional Use Permit No. 7, Map 212, to allow for the construction and operation of a solar facility up to 450 MW and associated infrastructure, including energy storage, a switchyard, and temporary construction staging and equipment storage on approximately ~~2,146.29~~2,244.99 acres in an A (Exclusive Agriculture) District, pursuant to Chapter 19.12.030.G and 19.12.030K of the Kern County Zoning Ordinance;

General Plan Amendment (Circulation)

(a) General Plan Amendment No. 5, Map 195, to the Circulation Element of the Kern County General Plan (General Plan) to remove future road reservations on section and mid-section lines within the project boundary;

(b) General Plan Amendment No. 6, Map 212, to the Circulation Element of the General Plan to remove future road reservations on section and mid-section lines within the project boundary;

(c) General Plan Amendment No. 7, Map 212, to the Open Space, Land Use, and Conservation Element of the General Plan to re-designate two parcels (APNs 244-233-06 and 244-421-01) from General Plan Designation 3.3 (Other Facilities) to General Plan Designation 8.5 (Resource Management).

Zone Variance:

(a) Zone Variance No. 1, Map 195, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the A-1 (Limited Agriculture) District to the A (Exclusive Agriculture) District across approximately ~~40.92~~79.56 total acres.

(b) Zone Variance No. 2, Map 212, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the A-1 (Limited Agriculture) District to the A (Exclusive Agriculture) District across approximately ~~12.66~~88.91 total acres.

Vesting Tentative Parcel Maps:

(a) Vesting Tentative Parcel Map No. 12577—Proposing a merger and re-subdivision of three (3) parcels into one (1) parcel of Case Map 195, Section 28, Township 11 North, Range 11 West, of County of Kern, consisting of 23.02 acres (gross), resulting in a 23.02 acre (gross) parcel.

(b) Vesting Tentative Parcel Map No. 12578—Proposing a merger and re-subdivision of twenty-eight (28) parcels into one (1) parcel of Case Map 195, Section 33, Township 11 North, Range 11 West, of County of Kern, consisting of 302.32 acres (gross), resulting in a 302.32 acre (gross) parcel.

(c) Vesting Tentative Parcel Map No. 12579—Proposing a merger and re-subdivision of six (6) parcels into one (1) parcel of Case Map 195, Section 34, Township 11 North, Range 11 West, of County of Kern, consisting of 157.93 acres (gross), resulting in a 157.93 acre (gross) parcel.

(d) Vesting Tentative Parcel Map No. 12580—Proposing a merger and re-subdivision of twenty-seven (27) parcels into one (1) parcel of Case Map 212, Section 4, Township 10 North, Range 11 West, of County of Kern, consisting of 90.81 acres (gross), resulting in a 90.81 acre (gross) parcel.

(e) Vesting Tentative Parcel Map No. 12581—Proposing a merger and re-subdivision of fifty-two (52) parcels into one (1) parcel of Case Map 212, Section 4, Township 10 North, Range 11 West, of County of Kern, consisting of 298.29 acres (gross), resulting in a 298.29 acre (gross) parcel.

(f) Vesting Tentative Parcel Map No. 12582—Proposing a merger and re-subdivision of twenty-four (24) parcels into one (1) parcel of Case Map 212, Section 8, Township 10 North, Range 11 West, of County of Kern, consisting of 500.58 acres (gross), resulting in a 500.58 acre (gross) parcel.

Offsite Features:

(a) Zone Classification Change No. 5, Map 212 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) to facilitate installation of offsite water storage tanks for construction and operations on approximately ~~20.26~~20.00 acres;

(b) Zone Classification Change No. 57, Map 197 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) to facilitate installation construction and operation of an off-site switchyard and temporary construction and equipment storage on approximately 34.82 acres;

(c) Conditional Use Permit No. 24, Map 197, to allow for the construction and operation of an off-site switchyard and temporary construction staging and equipment storage on approximately ~~29.4~~29.14 acres in an A (Exclusive Agriculture) District, pursuant to Chapter 19.12.030.G and 19.12.030.K of the Kern County Zoning Ordinance;

(d) Zone Variance No. 21, Map 197, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the A-1 (Limited Agriculture) District to the A (Exclusive Agriculture) District across approximately 34.82 total acres.

Franchise Agreement:

The project may enter into a franchise agreement for the existing ROW along 45th Street for underground MV transmission. An application would be submitted to the Kern County General Services-Property Management Division under separate cover.

Removal of Road Reservations:

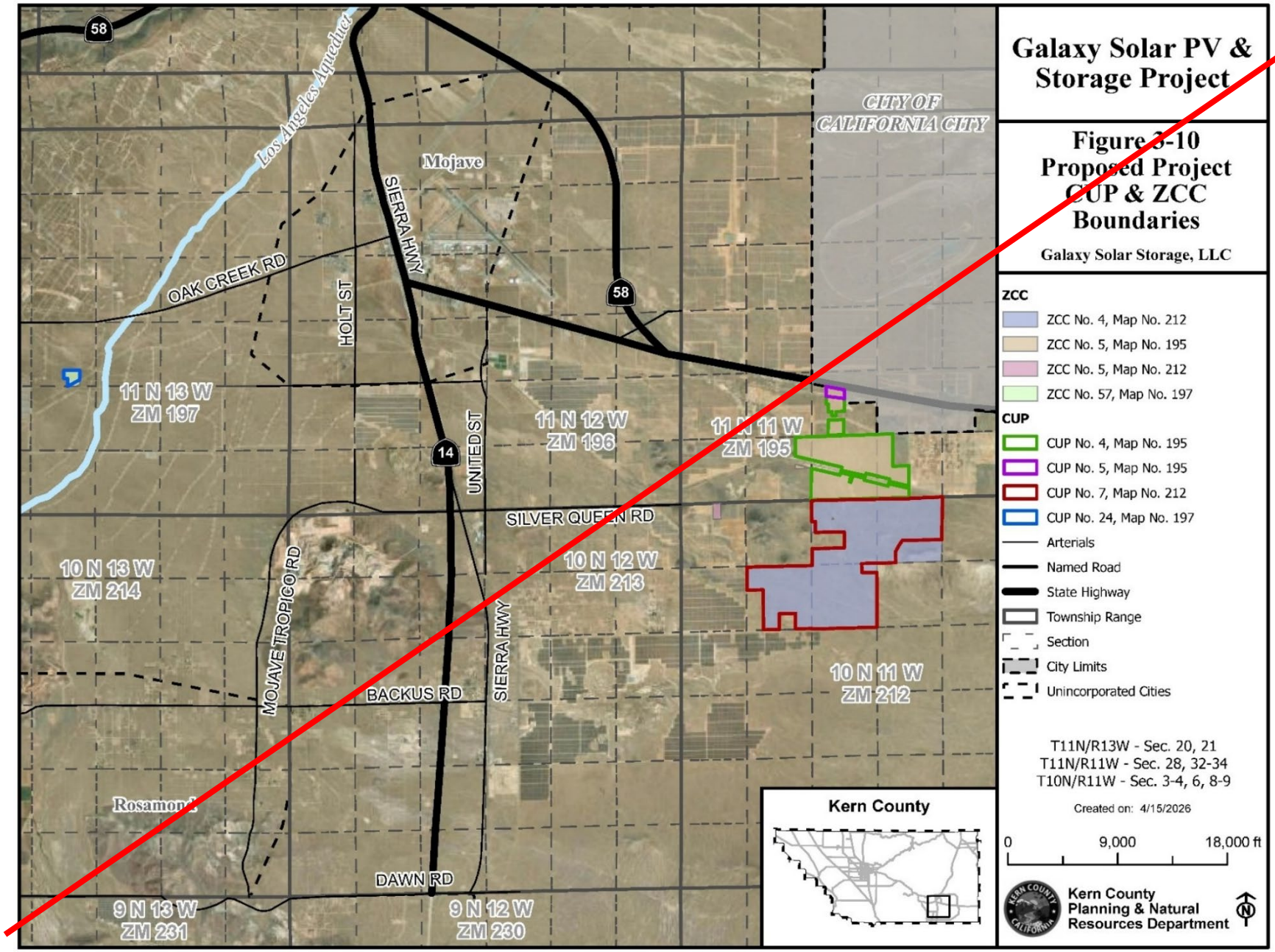
The project includes request for an amendment to the Circulation Element of the Kern County General Plan to remove road reservations designated for potential future arterial and collector roadways along section and mid-section lines within and adjacent to the project site. **Table 3-3,** *Road Reservations Requested for Removal*, and **Figure 3-11,** *Proposed General Plan Amendment (Circulation)* detail the section and mid-section line road reservations within the General Plan requested for removal.

TABLE 3-3: ROAD RESERVATIONS REQUESTED FOR REMOVAL

Section/ Township/Range	Type	Location	Description
3/10N/11W	Mid-Section	North-South	North-South mid-section line
3/10N/11W	Mid-Section	East-West	East-West mid-section line
3/10N/11W	Section	North	Northern section line
3/10N/11W	Section	East	Eastern section line
3/10N/11W	Section	West	Western section line
3/10N/11W	Section	South	Western half of South section line
4/10N/11W	Mid-Section	North-South	North-South mid-section line
4/10N/11W	Mid-Section	East-West	East-West mid-section line
4/10N/11W	Section	North	Northern section line
4/10N/11W	Section	East	Eastern section line
4/10N/11W	Section	South	Southern section line
4/10N/11W	Section	West	Western section line
8/10N/11W	Mid-Section	North-South	North-South mid-section line
8/10N/11W	Mid-Section	East-West	East-West mid-section line
8/10N/11W	Section	West	Northern half of western section line
8/10N/11W	Section	East	Eastern section line
8/10N/11W	Section	North	Northern section line
8/10N/11W	Section	South	Southern section line
9/10N/11W	Mid-Section	North-South	North-South mid-section line
9/10N/11W	Mid-Section	East-West	East-West mid-section line
9/10N/11W	Section	North	Northern section line

Section/ Township/Range	Type	Location	Description
9/10N/11W	Section	South	Southern section line
9/10N/11W	Section	East	Eastern section line
9/10N/11W	Section	West	Western section line
10/10N/11W	Section	North	Western half of the section line
10/10N/11W	Section	West	Western section line
28/11N/11W	Mid-Section	West	Western half of the east/west mid-section line
28/11N/11W	Mid-Section	North-South	North-South mid-section line
28/11N/11W	Section	South	South section line
32/11N/11W	Mid-Section	North-South	Southern half of north/south mid-section line
32/11N/11W	Section	East	Eastern section line
32/11N/11W	Section	North	East half of the North Section line
33/11N/11W	Mid-Section	North-South	North-South mid-section line [a]
33/11N/11W	Mid-Section	East-West	East-West mid-section line [a]
33/11N/11W	Section	East	Eastern section line [a]
33/11N/11W	Section	South	Southern section line
33/11N/11W	Section	North	Northern section line
33/11N/11W	Section	West	Western section line [a]
34/11N/11W	Mid-Section	West	West portion of the East-West mid-section line
34/11N/11W	Section	West	Western section line
34/11N/11W	Section	South	Southern section line
34/11N/11W	Section	North	West half of the North section line
34/11N/11W	Mid-Section	North-South	South portion of the north/south mid-section line

[a] Crosses BNSF Railway


Galaxy Solar PV & Storage Project
Figure 3-10
Proposed Project CUP & ZCC Boundaries
Galaxy Solar Storage, LLC
ZCC
ZCC No. 4, Map No. 212
ZCC No. 5, Map No. 195
ZCC No. 5, Map No. 212
ZCC No. 57, Map No. 197
CUP
CUP No. 4, Map No. 195
CUP No. 5, Map No. 195
CUP No. 7, Map No. 212
CUP No. 24, Map No. 197
Arterials
Named Road
State Highway
Township Range
Section
City Limits
Unincorporated Cities
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
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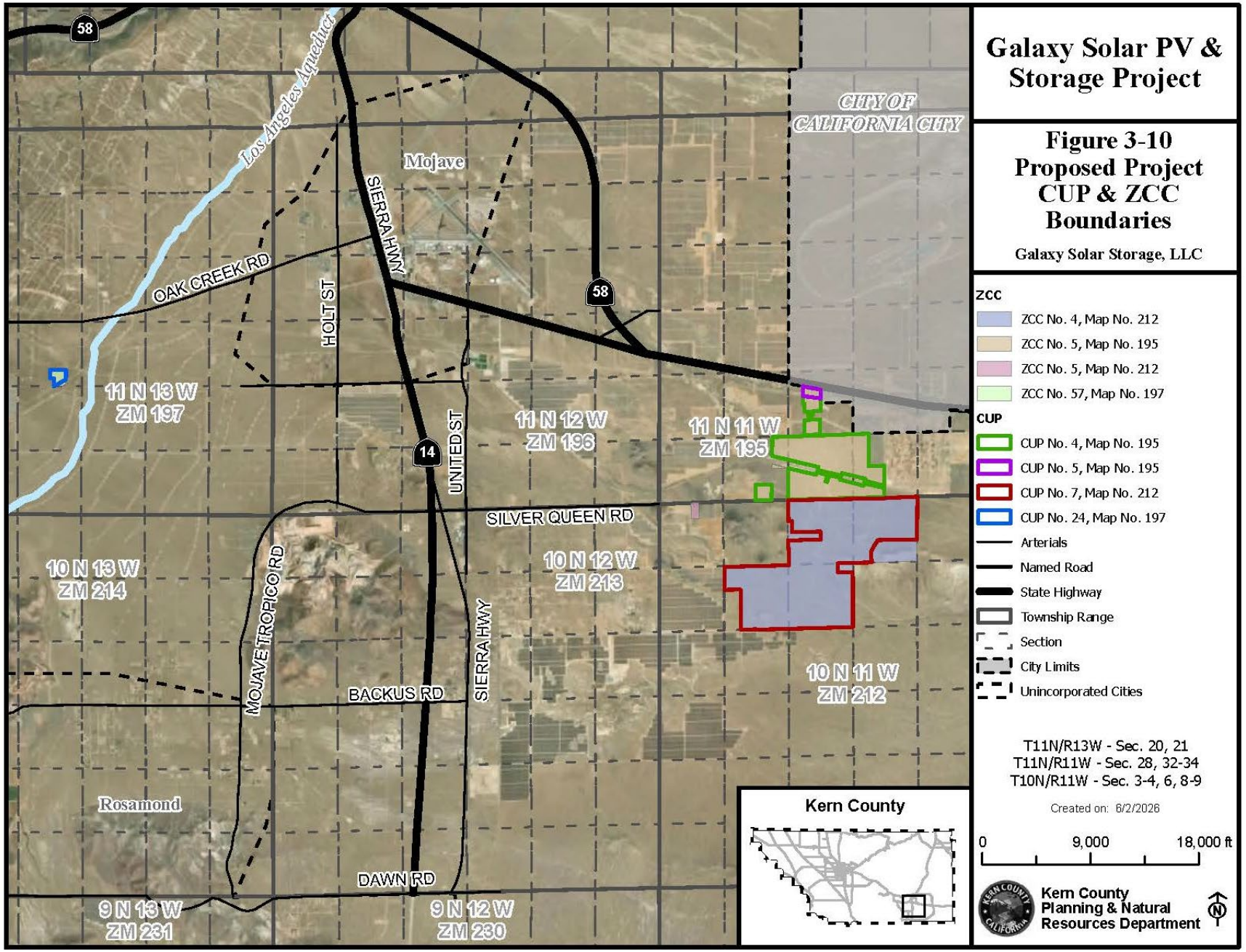
Kern County Planning & Natural Resources Department
Kern County
CITY OF CALIFORNIA CITY
Mojave
Rosamond
Los Angeles Aqueduct
SIERRA HWY
OAK CREEK RD
HOLT ST
UNITED ST
SILVER QUEEN RD
MOJAVE TROPICO RD
BACKUS RD
DAWN RD
58
14
11 N 13 W ZM 197
11 N 12 W ZM 196
11 N 11 W ZM 195
10 N 13 W ZM 214
10 N 12 W ZM 213
10 N 11 W ZM 212
9 N 13 W ZM 231
9 N 12 W ZM 230


Galaxy Solar PV & Storage Project
Figure 3-10
Proposed Project
CUP & ZCC
Boundaries
Galaxy Solar Storage, LLC
ZCC
ZCC No. 4, Map No. 212
ZCC No. 5, Map No. 195
ZCC No. 5, Map No. 212
ZCC No. 57, Map No. 197
CUP
CUP No. 4, Map No. 195
CUP No. 5, Map No. 195
CUP No. 7, Map No. 212
CUP No. 24, Map No. 197
Arterials
Named Road
State Highway
Township Range
Section
City Limits
Unincorporated Cities
T11N/R13W - Sec. 20, 21
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T10N/R11W - Sec. 3-4, 6, 8-9
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Kern County
Planning & Natural
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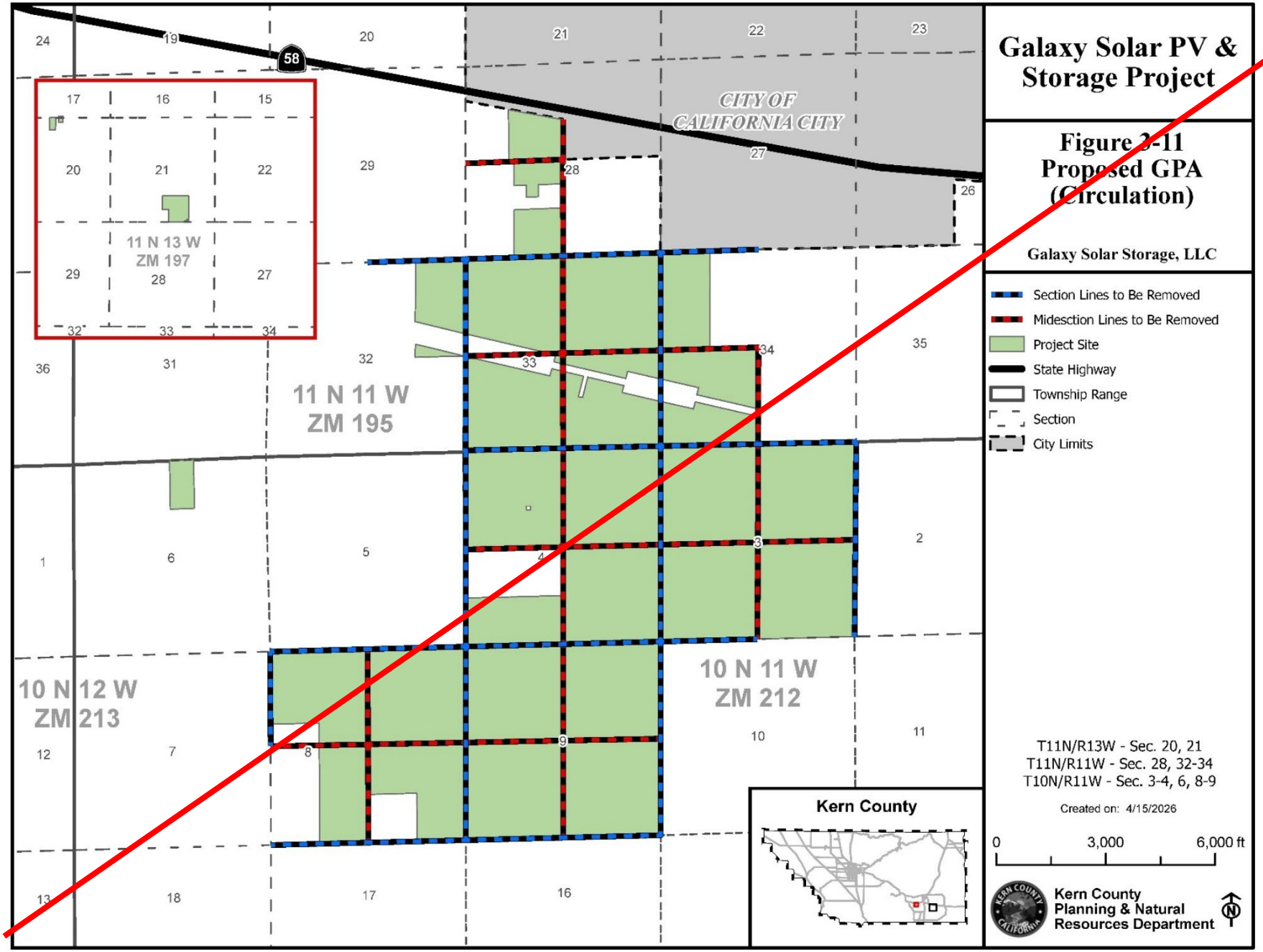
CITY OF CALIFORNIA CITY
Mojave
Rosamond
Los Angeles Aqueduct
OAK CREEK RD
HOLT ST
SIERRA HWY
UNITED ST
SILVER QUEEN RD
MOJAVE TROPICO RD
BACKUS RD
DAWN RD
58
14
11 N 13 W ZM 197
11 N 12 W ZM 196
11 N 11 W ZM 195
10 N 13 W ZM 214
10 N 12 W ZM 213
10 N 11 W ZM 212
9 N 13 W ZM 231
9 N 12 W ZM 230


Galaxy Solar PV & Storage Project
Figure 2-11
Proposed GPA (Circulation)
Galaxy Solar Storage, LLC
Section Lines to Be Removed
Midesction Lines to Be Removed
Project Site
State Highway
Township Range
Section
City Limits
CITY OF CALIFORNIA CITY
11 N 13 W ZM 197
11 N 11 W ZM 195
10 N 12 W ZM 213
10 N 11 W ZM 212
Kern County
T11N/R13W - Sec. 20, 21
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T10N/R11W - Sec. 3-4, 6, 8-9
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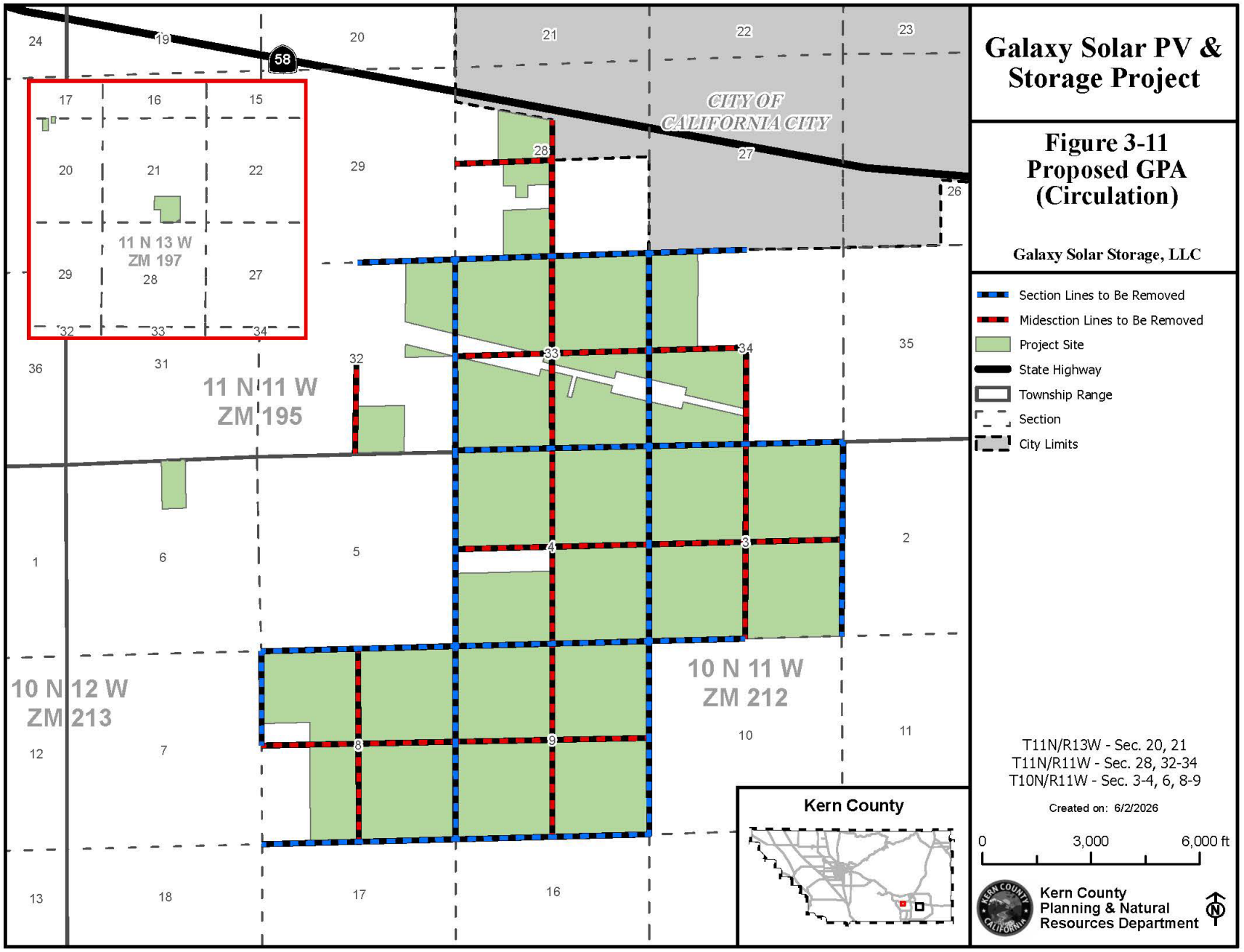
Galaxy Solar PV & Storage Project
Figure 3-11
Proposed GPA
(Circulation)
Galaxy Solar Storage, LLC
Section Lines to Be Removed
Midesction Lines to Be Removed
Project Site
State Highway
Township Range
Section
City Limits
CITY OF CALIFORNIA CITY
11 N 13 W
ZM 197
11 N 11 W
ZM 195
10 N 12 W
ZM 213
10 N 11 W
ZM 212
58
Kern County
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
Created on: 6/2/2026
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6,000 ft
Kern County
Planning & Natural
Resources Department

Vacation of Named Roads Appearing in Case Maps

Named, but not yet developed, roadways also appear on case maps previously recorded on the proposed project site. Should the environmental review or public and agency notification process result in the determination that additional vacations are required, appropriate applications will be submitted to supplement the entitlements listed above.

Vacation of Easements and Vesting Tentative Parcel Maps

It is also anticipated that many project proponent-owned parcels would be merged to the maximum extent feasible with the intention to provide access to one consolidated, large parcel in lieu of coordinating many access points to multiple, smaller parcels. Existing but undeveloped public access easements are proposed to be vacated through parcel maps that have been submitted separately to the Kern County Land Division Unit for review and approval.

The purpose of the request to vacate these undeveloped rights-of-way (ROWs) is to facilitate the optimal layout of solar panels by removal of unused/undeveloped public easements and other ROWs on vacant land. These easements and offers of dedication were created by grant deed or parcel maps. The merging of small project proponent-owned parcels into larger parcels through the parcel map process would allow for granting of fewer access easements to those larger parcels but will ensure legal access to the new parcel and to other non-merged parcels exists. The parcel maps are summarized below, shown in **Figure 3-12**, *Parcel Maps and Easements*, **Figure 3-13**, *Vesting Tentative Parcel Map Boundaries*, and **Figure 3-14***, Assessor's Parcelization Map*, and detailed information is provided as **Exhibit 1** to this Project Description.

- Vesting Tentative Parcel Map No. 12577—Proposing a merger and re-subdivision of three (3) parcels into one (1) parcel of Case Map 195, Section 28, Township 11 North, Range 11 West, of County of Kern, consisting of 23.02 acres (gross), resulting in a 23.02 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12578—Proposing a merger and re-subdivision of twenty-eight (28) parcels into one (1) parcel of Case Map 195, Section 33, Township 11 North, Range 11 West, of County of Kern, consisting of 302.32 acres (gross), resulting in a 302.32 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12579—Proposing a merger and re-subdivision of six (6) parcels into one (1) parcel of Case Map 195, Section 34, Township 11 North, Range 11 West, of County of Kern, consisting of 157.93 acres (gross), resulting in a 157.93 acre (gross) parcel.
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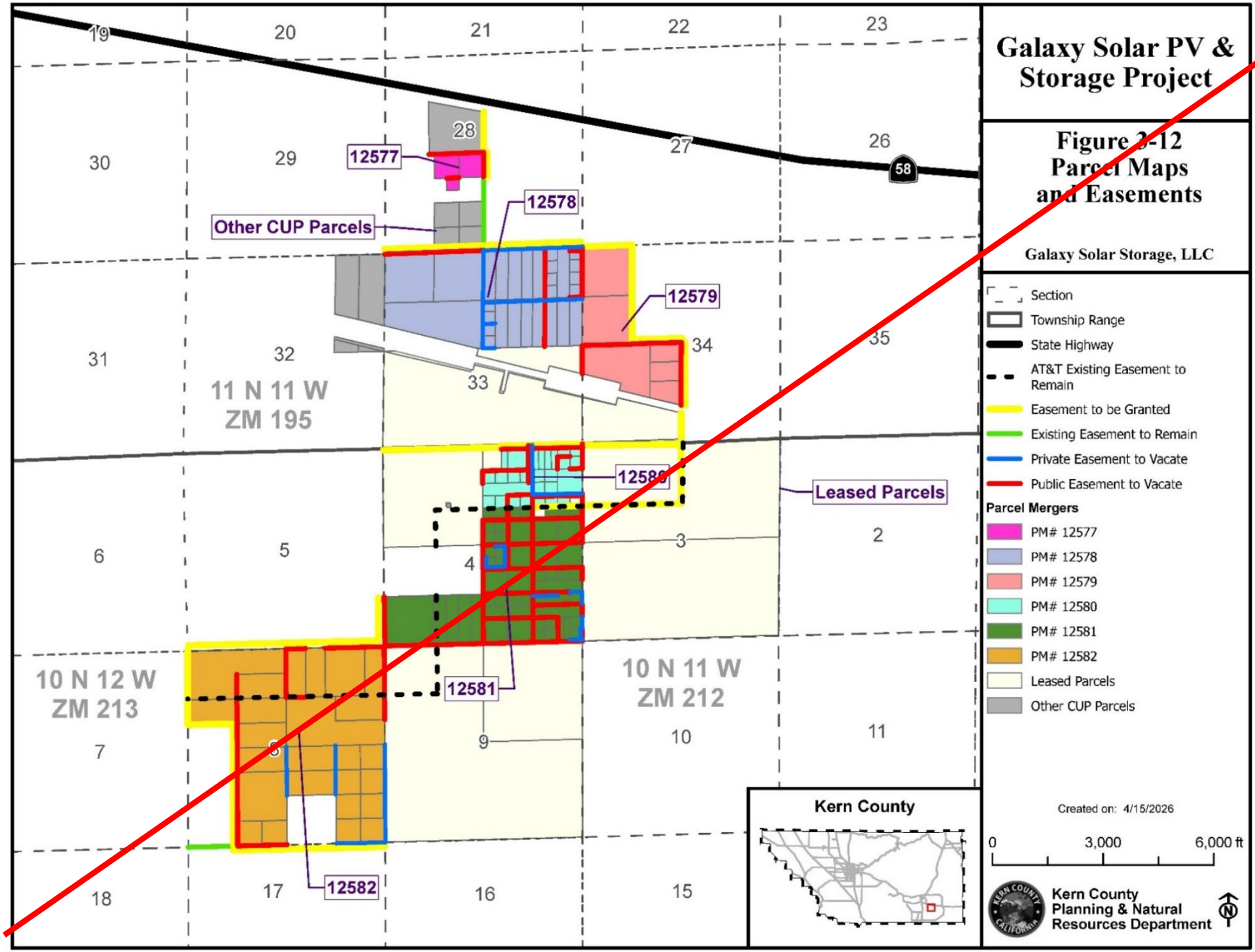
Decommissioning

At the end of the project's anticipated operational life of up to approximately 35 years, the project proponent would determine at that time whether the project site should be decommissioned and deconstructed or if it would seek an extension of its operation and the appropriate permitting pathways. If any portion of the project site is decommissioned, solar energy generation structures would be removed to facilitate site reclamation, thereby allowing conversion of the site to other uses in accordance with the applicable land use regulations in effect as well as the intentions of the landowner at that time.


Galaxy Solar PV & Storage Project
Figure 3-12
Parcel Maps and Easements
Galaxy Solar Storage, LLC
Section
Township Range
State Highway
AT&T Existing Easement to Remain
Easement to be Granted
Existing Easement to Remain
Private Easement to Vacate
Public Easement to Vacate
Parcel Mergers
PM# 12577
PM# 12578
PM# 12579
PM# 12580
PM# 12581
PM# 12582
Leased Parcels
Other CUP Parcels
Created on: 4/15/2026
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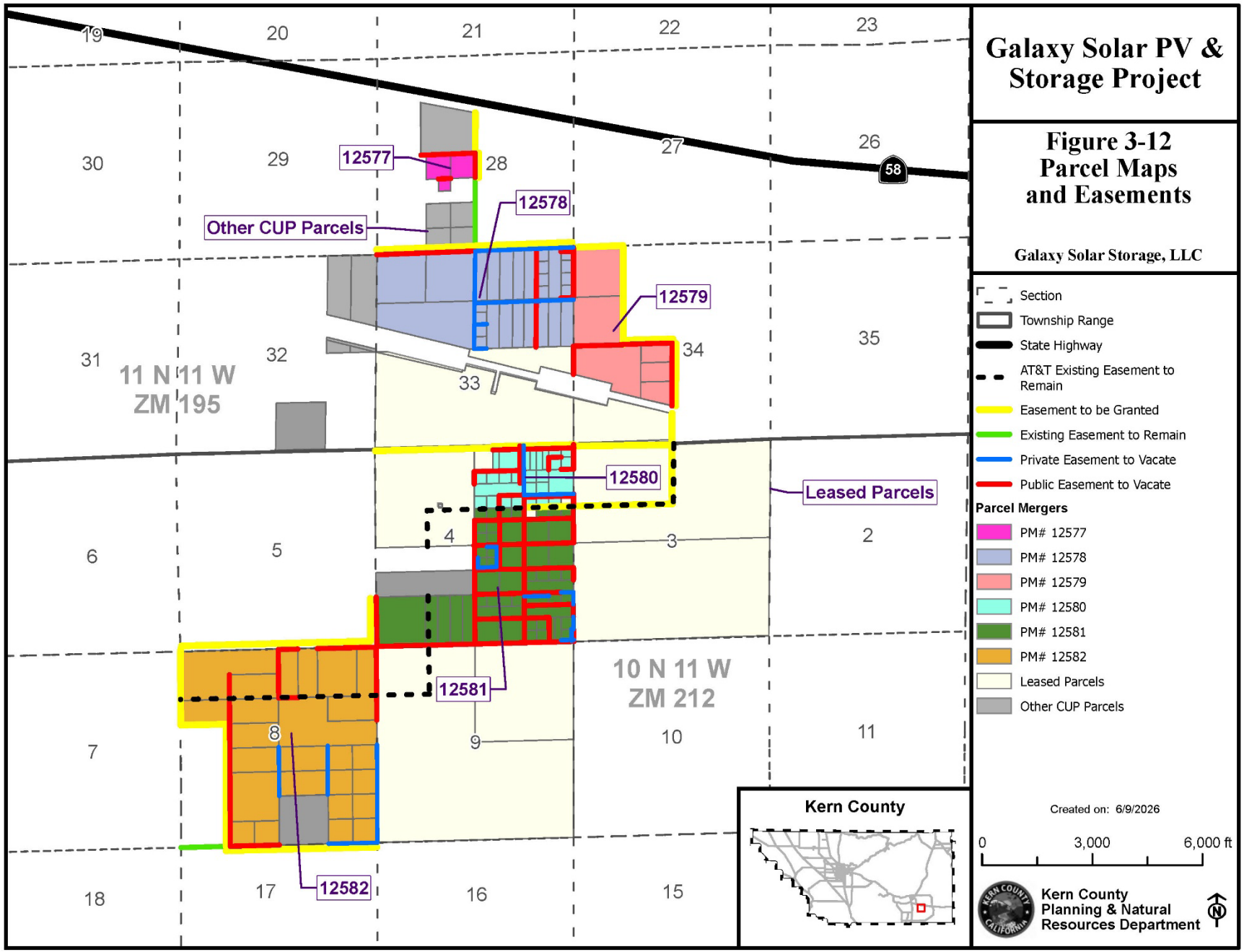
Kern County Planning & Natural Resources Department
Kern County
12577
12578
12579
12580
12581
12582
Other CUP Parcels
Leased Parcels
11 N 11 W
ZM 195
10 N 12 W
ZM 213
10 N 11 W
ZM 212
58


Galaxy Solar PV & Storage Project
Figure 3-12
Parcel Maps and Easements
Galaxy Solar Storage, LLC
Section
Township Range
State Highway
AT&T Existing Easement to Remain
Easement to be Granted
Existing Easement to Remain
Private Easement to Vacate
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Parcel Mergers
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PM# 12578
PM# 12579
PM# 12580
PM# 12581
PM# 12582
Leased Parcels
Other CUP Parcels
12577
12578
12579
12580
12581
12582
Other CUP Parcels
Leased Parcels
11 N 11 W
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ZM 212
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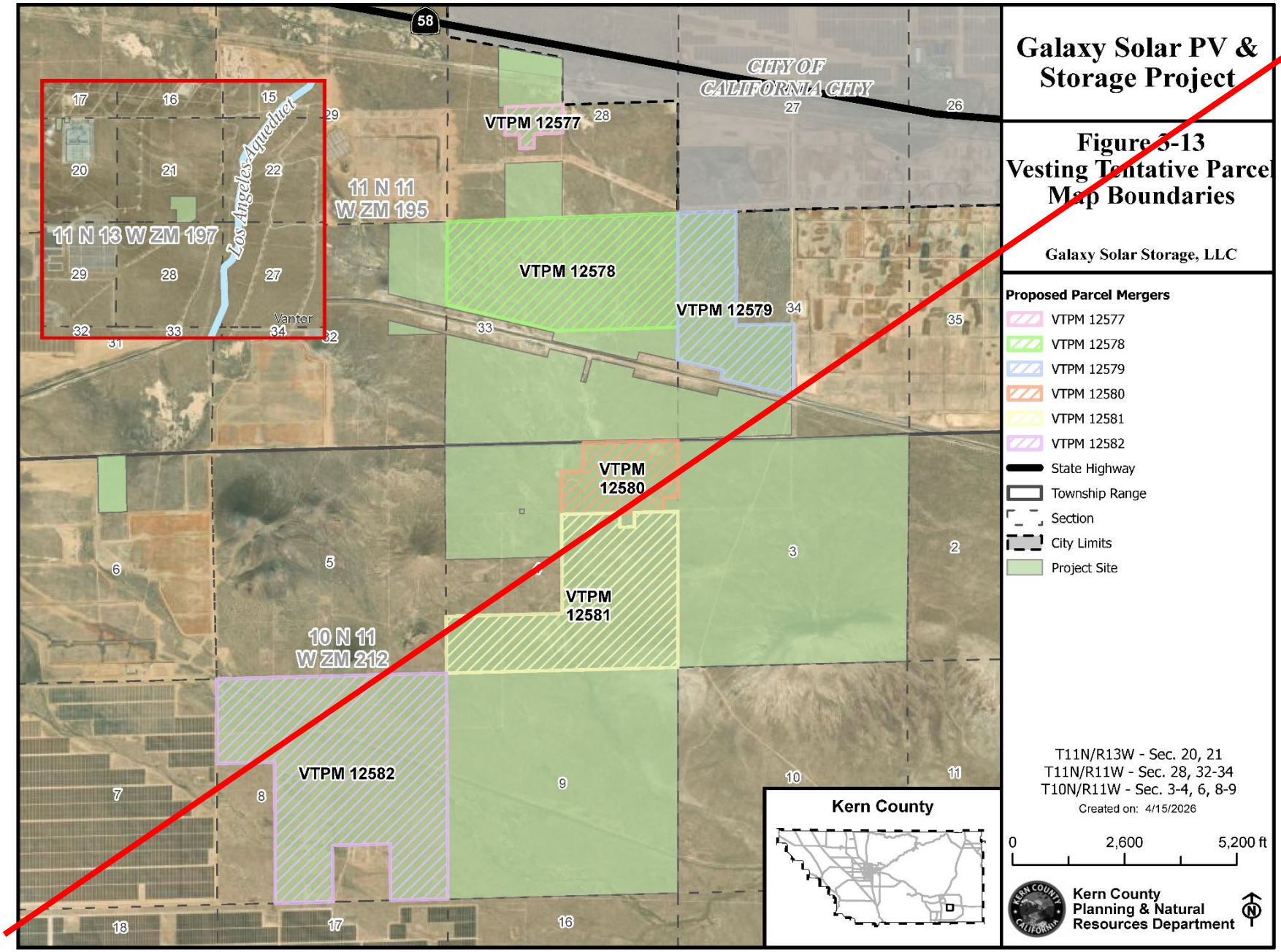
Kern County
Planning & Natural
Resources Department


Galaxy Solar PV & Storage Project
Figure 3-13
Vesting Tentative Parcel Map Boundaries
Galaxy Solar Storage, LLC
Proposed Parcel Mergers
VTPM 12577
VTPM 12578
VTPM 12579
VTPM 12580
VTPM 12581
VTPM 12582
State Highway
Township Range
Section
City Limits
Project Site
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
Created on: 4/15/2026
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5,200 ft
Kern County
Planning & Natural Resources Department
Kern County
VTPM 12577
VTPM 12578
VTPM 12579
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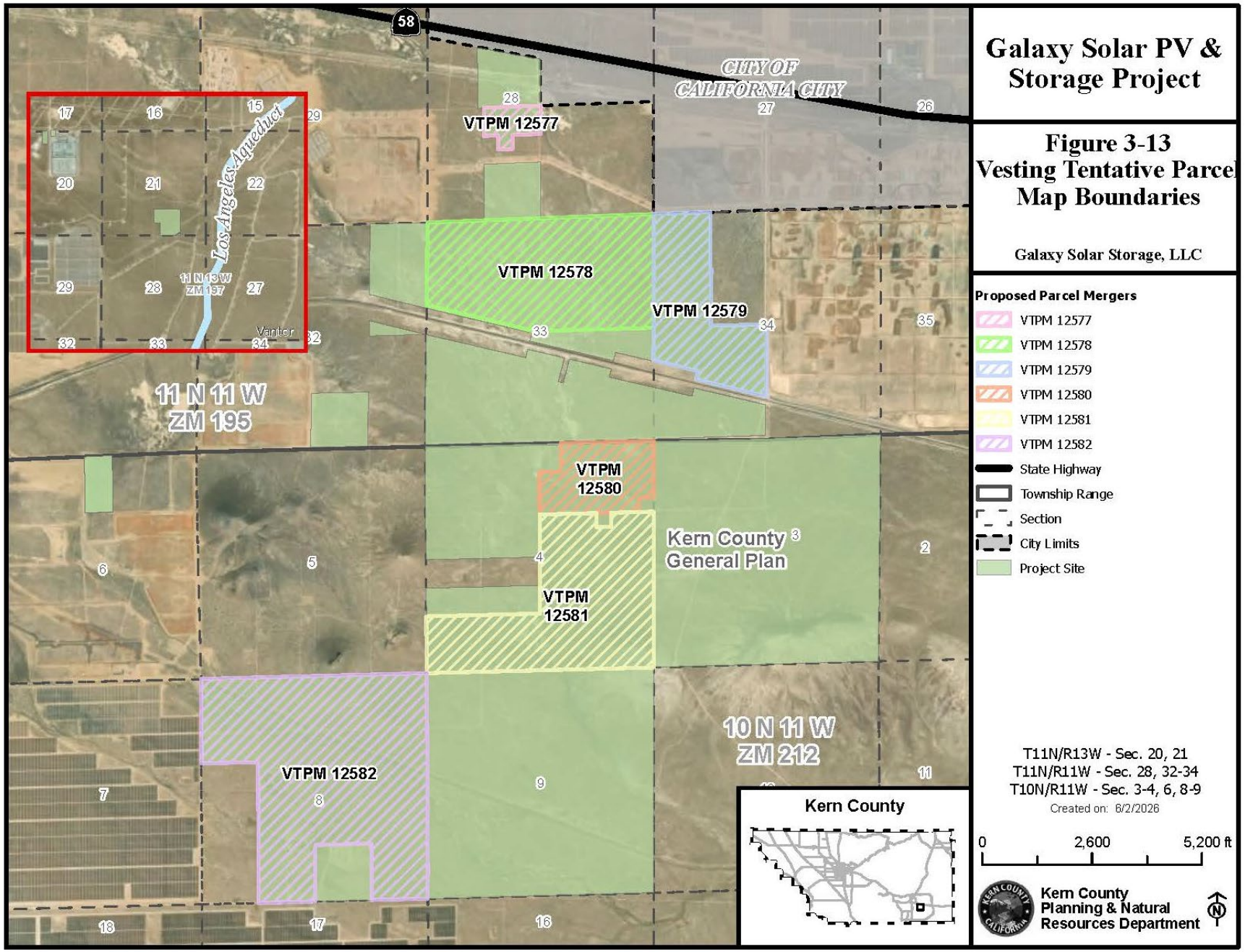
Galaxy Solar PV & Storage Project
Figure 3-13
Vesting Tentative Parcel Map Boundaries
Galaxy Solar Storage, LLC
Proposed Parcel Mergers
VTPM 12577
VTPM 12578
VTPM 12579
VTPM 12580
VTPM 12581
VTPM 12582
State Highway
Township Range
Section
City Limits
Project Site
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
Created on: 6/2/2026
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CITY OF CALIFORNIA CITY
VTPM 12577
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Kern County General Plan
Vantor
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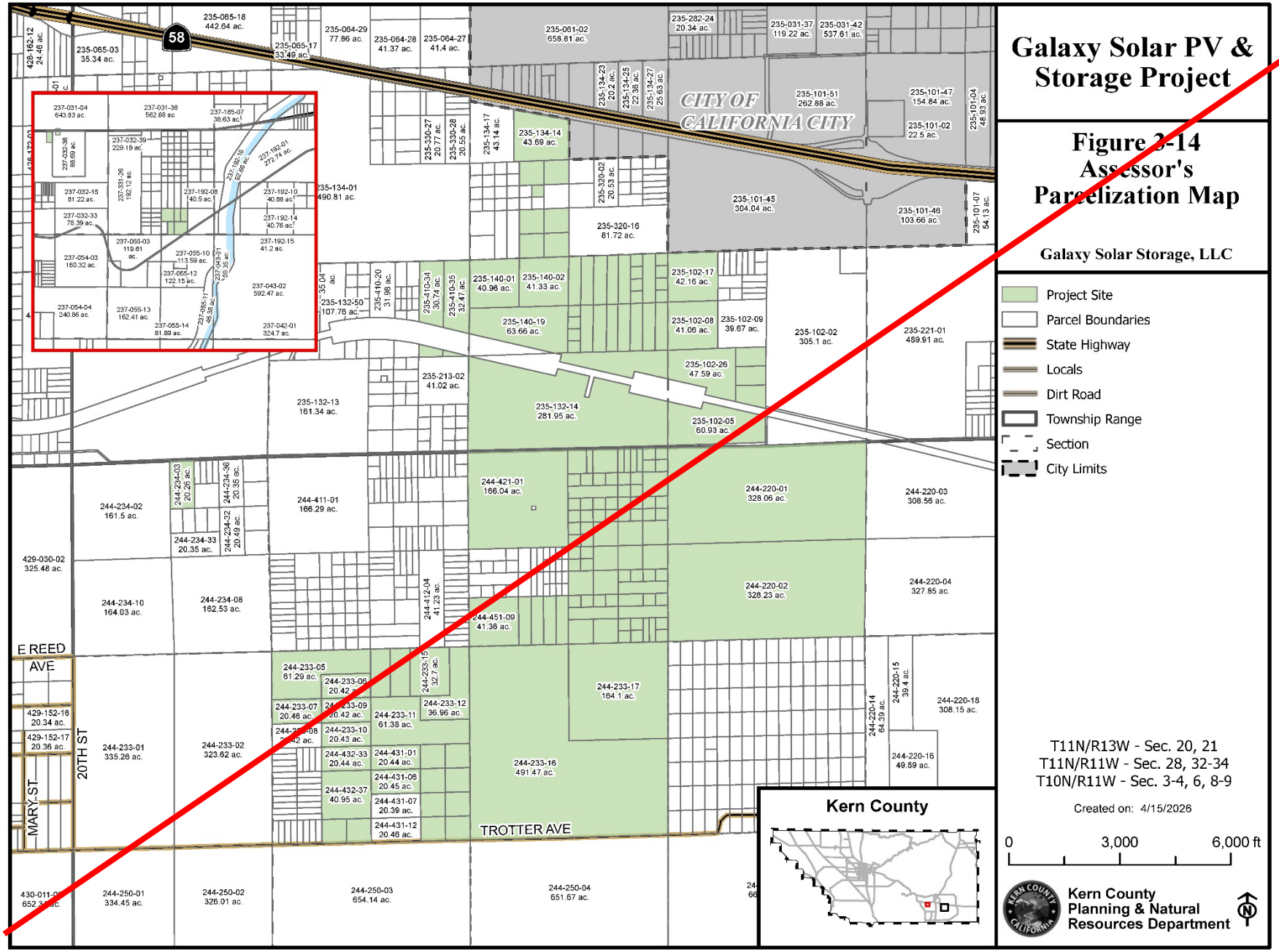
Galaxy Solar PV & Storage Project
Figure 2-14
Assessor's Parcelization Map
Galaxy Solar Storage, LLC
Project Site
Parcel Boundaries
State Highway
Locals
Dirt Road
Township Range
Section
City Limits
T11N/R13W - Sec. 20, 21
T11N/R11W - Sec. 28, 32-34
T10N/R11W - Sec. 3-4, 6, 8-9
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Kern County
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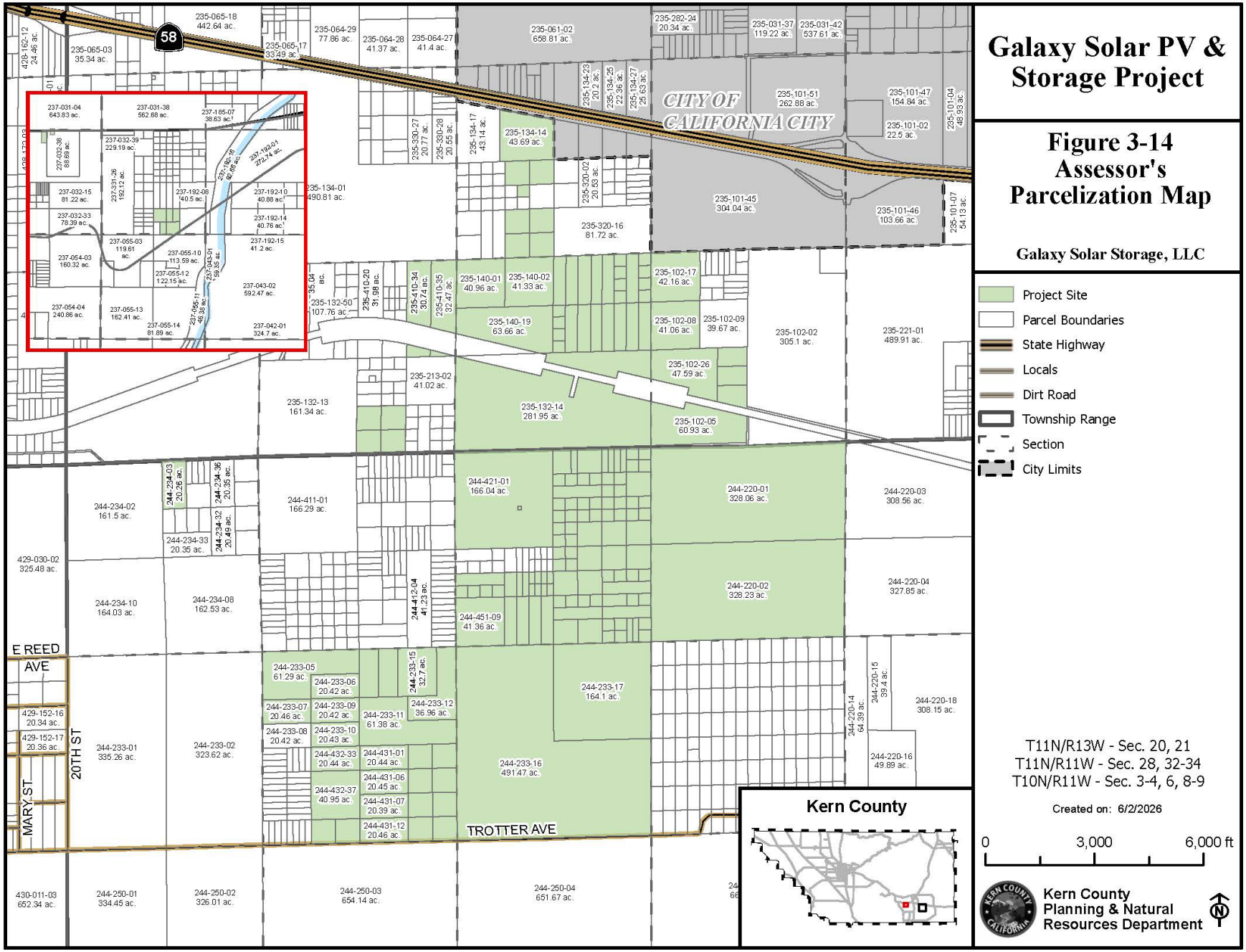
Galaxy Solar PV & Storage Project
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Kern County
Planning & Natural
Resources Department

Section 4.3, Air Quality, Page 4.3-59

SCE Interconnection Work

As previously discussed, SCE would complete system upgrades to facilitate interconnection of the project to the Windhub Substation as described in **Chapter 3,** *Project Description*, **Section 3.7.6**, *SCE Interconnection Work*.

Impacts associated with SCE's interconnection work are included in the whole project analysis. SCE interconnection work would be constructed within the existing SCE Windhub Substation and a small area across Oak Creek Road. All new and upgraded structures and equipment related to the interconnection work would be engineered, constructed (or caused to be constructed), operated, and maintained by SCE. SCE interconnection work represents a small portion of the overall project emissions and would comply with all applicable State and federal laws and regulations, including those regarding exposing sensitive receptors to substantial pollutant concentrations. ~~As stated previously in the project analysis, the implementation of **Mitigation Measures MM 4.3-1** through **MM 4.3-8** would reduce the exposure of substantial pollutant concentrations to sensitive receptors.~~ Thus, impacts would be less than significant.

Section 4.4, Biological Resources, Page 4.4-74—4.4-76

MM 4.4-3: During project construction and decommissioning, the project proponent and/or contractor(s) shall implement the following general avoidance and protective measures:

a. Immediately prior to conducting vegetation clearing or similar activities, the Lead Biologist(s) or their designee shall perform a pre-construction visual survey of the area to ensure that no special-status species are present. Daily reports of these inspections shall be retained by the Lead Biologist(s) and provided to the Kern County Planning and Natural Resources Department, and as required by resource agency permits issued to the project.

b. All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid natural resources where possible. Construction-related activities outside of the impact zone shall be avoided.

c. Access roads that are planned for use during construction activities shall not extend beyond the planned impact area; this area includes all previously disturbed lands and any location within the project fenceline not delineated for avoidance of sensitive biological resources. Where new access routes are required, the route shall be clearly marked prior to construction.

d. The project proponent/operator shall minimize the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. These areas shall be demarcated and disturbance activities, vehicles, and equipment shall be confined to these areas.

e. Any spoils shall be stockpiled in disturbed areas that lack native vegetation to the maximum extent practicable. Spoils that have been stockpiled and inactive for more

than 24 hours shall be inspected by the Lead Biologist(s) or approved Biological Monitor(s) for signs of special-status wildlife before moving or disturbing.

f. To prevent inadvertent entrapment of desert kit foxes, American badgers, or other animals during construction, all excavated steep-walled holes or trenches more than two (2) feet deep shall be covered with plywood or similar materials at the close of each working day. If holes or trenches cannot be covered, one or more escape ramps constructed of earthen fill or wooden planks, no less than 12 inches wide and secured at the top, shall be placed a minimum of every 100 feet within the open trench. Covered and non-covered holes or trenches shall be thoroughly inspected for trapped animals by the Lead Biologist(s) or approved Biological Monitor(s) at the beginning and end of each working day. Immediately before such holes or trenches are filled, they shall again be thoroughly inspected by the Lead Biologist(s), approved Biological Monitor(s) or trained staff approved by the Lead Biologist(s). If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape or the Lead Biologist(s) may capture and relocate the animal (for non-listed species). If a listed species is found trapped, all work in the vicinity shall cease immediately. If the animal is apparently uninjured, then the Lead Biologist(s) shall directly supervise the provision of escape structures and/or trench modification to allow the trapped animal to escape safely. The animal shall be allowed to leave the work area and project site on its own and work shall not resume in the vicinity until the animal is out of harm's way. If the listed animal is injured, then the Lead Biologist(s) or approved Biological Monitor shall immediately contact the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) to identify an individual with the appropriate permit or authorization to handle listed species, who shall bring the animal to a pre-identified wildlife rehabilitation or veterinary facility for care.

g. Burrowing owls, mammals, and nesting birds may use construction pipes, culverts, or similar structures for refuge or nesting. All towers that are of the monopole variety and all hollow vertical structures, such as solar mount poles, or fencing poles, shall be capped immediately after installation to prevent bird entrapment. Therefore, all construction pipes, culverts, or similar structures with a diameter of four (4) inches or more that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until the Lead Biologist(s) has been consulted and the animal has either moved from the structure on its own accord (for listed species) or until the animal has been captured and relocated (for non-listed species) by the Lead Biologist(s) or approved Biological Monitor(s). If the animal is a listed species, then work shall immediately halt in the vicinity, and the animal shall be allowed to move from the structure and the work area of its own accord. The Lead Biologist(s) will direct work stoppages near the animal to allow it to freely move out of the pipe and away from the work area. Listed species shall not be handled or captured by anyone without the appropriate permit or authorization.

h. No vehicle or equipment parked on the project site shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of listed wildlife species. If present, the animal shall be left to move on its own.

i. Vehicular traffic to and from the project site shall use existing routes of travel. Cross country vehicle and equipment use outside designated work areas shall be prohibited.

j. A speed limit of 15 miles per hour shall be enforced within the limits of the project site. If night work occurs on the project site, the speed limit shall be 10 miles per hour. This requirement shall be posted with signage noted throughout the site.

k. Fueling of equipment shall take place within existing roads or disturbed areas. No refueling within or adjacent to drainages (within 150 feet) shall be permitted. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary.

l. A long-term trash abatement program shall be established for construction, operations and maintenance, and decommissioning. Trash and food items shall be contained in closed containers to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs.

m. Workers shall be prohibited from bringing pets and firearms to the project site and from feeding wildlife.

n. Intentional and unpermitted killing or collection of any listed plant or wildlife species shall be prohibited.

o. Herbicides that may be used as vegetation control measures in project areas shall be restricted. All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and state/federal legislation as well as additional project-related restrictions deemed necessary by the USFWS or CDFW. No rodenticides shall be used on the project site.

p. To enable kit foxes and other wildlife (e.g., American badger) to pass through the project site after construction, the permanent perimeter security fence around the solar field shall be a wildlife friendly design that meets the goals of allowing wildlife to move freely through the project site during operation. The fence around the solar field ~~leaving 4- to 7-inch openings or portals in the fence or the fence~~ shall be raised 4 to 7 inches above the ground leaving a gap between the fence mesh and the ground.~~, or as approved by USFWS or CDFW. In the latter case t~~The bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that passes under the fence. Should this measure conflict with permits (ITP) issued by USFWS or CDFW, the measures in the ITP shall prevail.

Section 4.4, Biological Resources, Page 4.4-77—4.4-78

MM 4.4-5: Within 14 days prior to the commencement of ground-disturbing activities, the Lead Biologist(s) or their designee shall perform a pre-construction visual survey of the area to determine if rare plants and/or California Desert Native Plant Act species are present.

Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur no more than 14 days prior to ground disturbance in specific areas of the site. Copies of reports for these inspections shall be retained by the Lead Biologist(s) and provided to the Kern County Planning and Natural Resources Department to be kept on file and to CDFW upon request.

If no species with a California Native Plant Society Rank of 2B or higher are observed, no further mitigation is required.

If species with a California Native Plant Society Rank of 2B or higher are observed, and have not otherwise been accounted for in an approved removal action or separate mitigation action (see **Mitigation Measure MM 4.4-6** for Alkali mariposa lily), they shall be delineated with stakes and/or flagged for avoidance to the extent feasible. After the preconstruction survey determines the exact location of these species, if present, on the project site and the number of individuals or populations present, the project proponent/operator shall submit written documentation to the Kern County Planning and Natural Resources Department confirming implementation of the measures described below:

a. The project proponent/operator shall work with the Lead Biologist(s) to determine presence of the subject plant species and identify all known locations of subject plant species to establish "avoidance areas". All species with a California Native Plant Society Rank of 2B or higher found within the project site that has not otherwise been accounted for in an approved removal action or separate mitigation action shall be avoided by a buffer of 50 feet. Sturdy, highly visible, orange plastic construction fencing (or equivalent material verified by the Lead Biologist(s)) shall be installed around all locations of detected plant species to protect from impacts during the construction phase, until they can be relocated. The fence shall be securely staked and installed in a durable manner that would be reasonably expected to withstand wind and weather events and last at least through the construction period.

b. Any identified species with a California Native Plant Society Rank of 2B or higher present on the site that have not otherwise been accounted for in an approved removal action or separate mitigation action and that cannot be feasibly avoided in final project design shall require the project proponent to prepare and submit a transplantation plan that includes the following:

    1. Identify an area of occupied habitat to be preserved and removed;
    2. Identify areas of onsite or offsite preservation, restoration, or enhancement locations;
    3. Methods for preservation, restoration, enhancement, and/or translocation;
    4. Indicate a replacement ratio and success standard developed in coordination with the appropriate agencies for impacts to individuals;
    5. Establish a monitoring program to ensure mitigation success;
    6. Create an adaptive management and remedial measures in the event that performance standards are not achieved;
    7. Ensure financial assurances and a mechanism for conservation of any mitigation lands required in perpetuity.

c. Temporary ground disturbance associated with the gen-tie lines or collector lines shall be recontoured to natural grade (if the grade was modified during the temporary disturbance activity) and revegetated with an application of a native seed mix prior to or during seasonal rains to promote passive restoration of the area to pre-project conditions. However, if invasive plant species were present, these species would not be restored. An area subjected to temporary ground disturbance means any area that is disturbed but will not be subjected to further disturbance as part of the project. This does not include areas already designated as urban/developed. Prior to seeding temporary ground disturbance areas, the Lead Biologist(s) will review the seeding palette to ensure that no seeding of invasive plant species, as identified in the most recent version of the California Invasive Plant Inventory for the region, will occur.

Section 4.4, Biological Resources, Page 4.4-78

MM 4.4-6: Alkali mariposa lily, a rare plant species with a California Native Plant Society rank of 1.B2 was documented as present on the project site. If the project would eliminate more than 10 percent of the local population, a Habitat Mitigation Plan would be prepared and would include the following:

a. A figure illustrating the area of the population to be preserved, and the area of the population to be removed;

b. Identification of on-site or off-site preservation, restoration, or enhancement location(s) and avoidance of those locations through the establishment of preservation areas and/or buffers;

c. Methods for preservation, restoration, enhancement, and/or population translocation;

d. A replacement ratio ~~and success standard criteria~~of 1:1 for occupied habitat or an alternative equivalent mitigation in coordination with the C~~c~~ounty;

e. A five-year monitoring program to ensure mitigation success in accordance with the following survivorship percentage performance standard:

   1. Because the plant lives above-ground during only a portion of its lifecycle, a minimum of 90 percent survival during one or more of the monitoring periods shall be considered success for this species.

f. Adaptive management and remedial measures in the event that performance standards are not achieved; and

g. Financial assurances and a mechanism for conservation of any mitigation lands required in perpetuity.

A 1:1 mitigation ratio for occupied habitat is considered sufficient because alkali mariposa lily is not federally or state listed as threatened or endangered and is relatively common in the project area. Copies of all surveys and reports shall be submitted to the Kern County Planning and Community Development Department.

Section 4.4, Biological Resources, Page 4.4-78—4.4-79

MM 4.4-8: The project shall avoid western Joshua tree (WJT) individuals, if feasible except to the extent take is permitted by the California Department of Fish and Wildlife (CDFW). If avoidance of WJT is not feasible, as determined by the Lead Biologist, and p~~P~~rior to the issuance of grading permits, the project applicant shall consult with CDFW ~~regarding~~ and obtain an incidental take permit (ITP) for the take of WJT and shall comply with all avoidance, minimization, and compensatory mitigation measures, as set forth in any incidental take permit issued to the project by CDFW. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department.

The project proponent shall also submit to the Kern County Planning and Natural Resources Department confirming documentation that the following has been implemented where take of WJT individuals cannot be avoided:

a. Prior to the issuance of a grading permit, the project proponent/operator shall develop a Joshua Tree Preservation Plan or other similar plan as required by any incidental take permit issued to the project by CDFW. The Plan shall be prepared by the Lead Biologist(s) or their designee pre-approved by Kern County and shall be approved by the appropriate agencies, including Kern County, prior to implementation. At a minimum, the plan shall identify the methods utilized, as applicable, ~~that the project is taking~~ to comply with any California Endangered Species Act (CESA) or CDFW take requirements including relocation methods, monitoring and reporting, and compensatory mitigation related to the protection or mitigation of impacted Joshua trees. The Plan shall also clearly delineate how the project includes restoration and enhancements of WJT habitats through relocation of a minimum of 900 onsite WJT stems to approved onsite or offsite conserved lands.

b. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department to be kept on file. ~~The Plan shall also clearly delineate how the project includes restoration and enhancements of WJT habitats through relocation of a minimum of 900 onsite WJT stems to onsite or offsite lands.~~

c. Prior to final occupancy approval, a Post WJT Relocation Report shall be submitted to the Kern County Planning and Natural Resources Department documenting completion of WJT relocation.

Section 4.4, Biological Resources, Page 4.4-79—4.4-80

MM 4.4-10: If construction and decommissioning activities are conducted during the typical nesting bird season (February 1 through August 31), the Lead Biologist(s) or their designee shall conduct a pre-construction or pre-decommissioning nesting survey within 10 days of ground disturbance activities to reduce potential impacts to avian species. Surveys need not be conducted for the entire project site at one time; they may be phased so that surveys occur within 10 days prior to disturbance in specific areas of the site. The survey area shall cover a 500-foot buffer (where legally accessible).

a. If nesting birds/raptors are observed, ~~and continuous monitoring by the qualified biologists(s) will occur,~~ the Lead Biologist(s) or approved Biological Monitor(s) shall establish an appropriate buffer distance around the nest site (typically 100 feet for passerines and up to 500 feet for Le Conte's thrasher and raptors) and if feasible, continuous monitoring by a qualified biologist shall occur. If continuous monitoring is not feasible, then a minimum no-disturbance buffer of ~~250~~ 100 feet will be established for non-listed passerines under the protection of MBTA. Continuous monitoring is required for listed passerines and raptors. The buffer shall remain in place until the Lead Biologist(s) or approved Biological Monitor(s) has determined that the nest is no longer active. Encroachment into the buffer may occur at the discretion of the Lead Biologist(s) in consultation with the Kern County Planning and Natural Resources Department. Nesting bird protections will only apply to MBTA, CESA, and/or ESA species and will not be applied to non-native bird species (i.e. European starlings, English sparrows, rock doves, etc.).

b. If construction is scheduled to occur during the non-nesting season (September 1 to January 31), no pre-construction surveys or additional measures are required for nesting birds, including raptors.

Section 4.4, Biological Resources, Page 4.4-80—4.4-81

MM 4.4-11: No more than 14 days prior to commencement of ground-disturbing activities, the Lead Biologist(s) or their designee shall conduct a pre-construction survey in areas with suitable western burrowing owl habitat proposed for disturbance within the project site and 500-meter buffer (where legally accessible) to determine if occupied known and/or occupied nesting western burrowing owl burrows are present. Burrowing owl burrows shall be evaluated and classified per the definitions below:

a. Potential Burrow: Any subterranean hole four inches or larger for which no current evidence is present to conclude that the burrow is being used by a burrowing owl.

b. Occupied Known Burrow: A burrow that shows sign of burrowing owl presence (whitewash, feathers, pellets, prey remains, eggshell fragments) and presence of at least one burrowing owl. If monitoring confirms that burrowing owl are no longer using a burrow, it will be redesignated as potential.

c. Occupied Nesting Burrow: A burrow where monitoring overseen by the Lead Biologist(s) or approved Biological Monitor demonstrates the presence of burrowing owl eggs, chicks, dependent young, and/or brooding or egg incubation (via inter burrow scope).

Survey methodology shall be consistent with the methods outlined in the 2012 California Department of Fish and Game Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 7 to 20 meters apart, adjusting for vegetation height and density as needed, and noting burrows with fresh burrowing owl sign or presence of burrowing owl. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur prior to disturbance in specific areas of the site. The western burrowing owl surveys may be conducted in conjunction with other required preconstruction surveys, if timing is appropriate. Copies of the survey results shall be submitted to the Kern County Planning and Natural Resources Department.

a. If potential burrowing owl burrows are detected any time of year, burrows may be excavated under the direct supervision of the Lead Biologist without prior camera monitoring.

b. If occupied known and/or occupied nesting burrowing owl burrows are detected, a no-disturbance buffer shall be established around the burrow and no ground-disturbing activities may occur within the buffer zone.

c. An established burrowing owl burrow no-disturbance buffer may be removed once the burrowing owl(s) is/are no longer using the burrow, as determined by the Lead Biologist (redesignated as a potential burrow).

The size of employed no-disturbance buffers may be up to 500 meters from an occupied known and/or occupied nesting burrowing owl burrow year-round. Buffer size is dependent upon time of year and level of construction activity disturbance. ~~Depending on the level of disturbance, a smaller buffer may be established by the Lead Biologist based on the visibility and sensitivity responses of each individual burrowing owl.~~ Ultimate buffer distances shall be determined in consultation with CDFW based on the visibility and sensitivity responses of each burrowing owl and as defined in the incidental take permit. Buffers shall be maintained for the duration the burrowing owl burrow remains occupied as determined by the Lead Biologist.

In October 2024, western burrowing owl was designated a candidate species under the CESA. If, at the commencement of project construction, western burrowing owl is present and is either still a candidate species, or has been listed as threatened, or endangered under CESA, and avoidance of occupied known and/or occupied nesting western burrowing owl burrows is infeasible as determined by the Lead Biologist, the Applicant shall ~~consult with the California Department of Fish and Wildlife (CDFW) regarding the potential for project construction activities to result in take of burrowing owl~~ obtain an incidental take permit (ITP) for western burrowing owl and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ~~Incidental Take Permit (~~ITP~~)~~ issued for the project by CDFW authorizing take of the species.

Section 4.4, Biological Resources, Page 4.4-83—4.4-84

MM 4.4-18: Preconstruction surveys for Crotch's bumble bee shall be conducted prior to initial ground disturbing activities. The survey area shall consist of suitable habitat areas within the project site and 50-foot buffer (access permitting). Surveys and timing would be consistent with the survey methodologies set out in the CDFW Survey Considerations for CESA Candidate Bumble Bee (CDFW, 2023) or as determined adequate for the project per coordination with the California Department of Fish and Wildlife (CDFW). The purpose of this survey will be to identify active Crotch's bumble bee nest colonies.

a. If active Crotch's bumble bee nests are discovered onsite, the Lead Biologist(s) or approved Biological Monitor shall establish a 50-foot no disturbance buffer around the nest to reduce the risk of disturbance or accidental take.

b. If establishment of a no disturbance buffer is feasible, construction activities shall not occur within the no disturbance buffer until the Lead Biologist(s) determines that the colony is no longer active (i.e., no Crotch's bumble bees are seen flying in or out of

the nest for three consecutive days indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined inactive, construction activities within the no disturbance buffer(s) shall be allowed to resume.

c. In June 2019, Crotch's bumble bee was designated a candidate species under the CESA. If, at the commencement of project construction, Crotch's bumble bee is present and is either still a candidate species, or has been listed as threatened, or endangered under CESA, and ~~If~~ avoidance of an active nest is not feasible, as determined by the Lead Biologist, the project proponent/operator shall ~~consult with CDFW regarding potential for project activities to result in~~ obtain an incidental take permit of the Crotch's bumble bee and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department.

Section 4.4, Biological Resources, Page 4.4-94

The project would contribute to cumulative impacts to rare plant species, including alkali mariposa lily and WJT; however, after implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-3**, **MM 4.4-6, MM 4.4-8**, and **MM 4.4-15**, which includes pre-construction surveys, avoidance, revegetation, and other compensation via the CFGC, the project's incremental contribution of impacts to rare plant species would not be cumulatively considerable and is thus considered less than significant, with the exception of WJT, which would be significant and unavoidable.

Section 4.9, Hazards and Hazardous Materials, Page 4.9-46

SCE Interconnection Work

As previously discussed, SCE would complete system upgrades to facilitate interconnection of the project to the Windhub Substation as described in **Chapter 3**, *Project Description*, **Section 3.7.6**, *SCE Interconnection Work*.

Impacts associated with SCE's interconnection work are included in the whole-project analysis. SCE interconnection work would be constructed within the existing SCE Windhub Substation and a small area across Oak Creek Road. SCE interconnection work would not interfere with any known existing emergency response plans, emergency vehicle access, or personnel access. While the final design and construction methods are still being developed by SCE, the use of jack and bore construction reduces the need for extensive surface excavation of Oak Creek Road, reducing traffic delays and minimizing environmental impacts. It is expected that traffic controls, such as flagmen, would be needed during portions of the work for safety reasons. ~~SCE would be required to follow the project's Construction Traffic Control Plan, which considers access for emergency vehicles to the project as required by **Mitigation Measure MM 4.14-1** (see **Section 4.14**, *Public Services*, for full mitigation measure text). Additionally, SCE would be required to implement the project's Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the current California Fire Code and Kern County Fire Code as required by **Mitigation Measure MM 4.15-1** (see **Section 4.15**, *Transportation*, for full mitigation measure text).~~ As such, impacts related to impairment of the implementation of, or physical interference with, an adopted

emergency response plan or emergency evacuation plan would be less than significant.

Section 4.11, Land Use and Planning, Page 4.11-42-43

SCE Interconnection Work

As previously discussed, SCE would complete system upgrades to facilitate interconnection of the project to the Windhub Substation as described in **Chapter 3**, *Project Description*, **Section 3.7.6**, *SCE Interconnection Work*.

Impacts associated with SCE interconnection work would be similar to those described above for the rest of the project. SCE interconnection work would be constructed within the existing SCE Windhub Substation and a small area across Oak Creek Road that is undeveloped. SCE would comply with the applicable land use policies and regulations established by the Kern County General Plan, the Kern County Zoning Ordinance and the Kern County Airport Land Use Compatibility Plan. ~~Additionally, SCE would implement **Mitigation Measure MM 4.9-3**, which would require consultation with the FAA and obtaining approval if needed.~~ Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation measures are required~~Implementation of **Mitigation Measure MM 4.9-3** would be required (see **Section 4.9**, *Hazards and Hazardous Materials*, for full text of this measure)~~.

Level of Significance

Impacts would be less than significant~~With implementation of **Mitigation Measure MM 4.9-3** (see **Section 4.9**, *Hazards and Hazardous Materials*, for full text of this measure), impacts would be less than significant~~.

Section 4.14, Public Services, Page 4.14-19

SCE Interconnection Work

Southern California Edison (SCE) would complete system upgrades to facilitate interconnection of the project to the Windhub Substation as described in **Chapter 3**, *Project Description*, **Section 3.7.6**, *SCE Interconnection Work*.

Impacts associated with SCE's interconnection work would be similar to those described above for the rest of the project. SCE interconnection work would be constructed within the existing SCE Windhub Substation and a small area across Oak Creek Road. ~~The fire safety plan prepared for the project would cover the SCE interconnection work as well, as required by **Mitigation Measure MM 4.14-1**~~. As previously described, most of the construction workforce is expected to live in the region and would commute to the site from various local communities. Given the limited number of workers and the short-term construction period, SCE interconnection work would not require new or physically altered governmental facilities or affect service ratios, response times, and other fire protection, police protection, and law enforcement performance objectives. SCE also would implement standard best management practices during their work. Therefore, impacts to public services as result of SCE interconnection work would be less than significant.

Section 4.14, Public Services, Page 4.14-19—4.14-21

MM 4.14-2: Payment of property taxes or Cumulative Impact Charge (CIC):

a. The project shall pay all legally required property taxes; or

b. If the project qualifies, based on State Legislative action and the State Board of Equalization guidance, for any reduction in property taxes under a Solar Tax Exclusion or other specific property tax relief for solar or battery storage regardless of the name, then the following CIC shall apply. The first annual payment is to be paid by December 31 of the year the first legislatively provided property tax reduction is assessed, and annually every year for the life of the project, or as a lump sum for multiple years, until the project is decommissioned and the Conditional Use Permit(s) is/are voided.

1. Submittal of Building Permit or Calculation of Amount

A. Any building permit or calculation of amount submitted shall be accompanied by a map and legal description of the entire approved Conditional Use Permit area.

B. The map shall calculate the CIC net acreage as follows:

i. Total gross acreage of the approved Conditional Use Permit.

ii. Total acres of recorded easements.

iii. Delineation (using, for example, areas on a site plan) of any permanent structures or energy storage that is not covered under a property tax reduction and evidence from legislation or State Board of Equalization that they have no reduction in taxes

C. Formula is Net Acreage = B.i minus (B.ii and B.iii), if applicable.

D. Temporary storage areas or non-permanent commercial coaches or cargo containers for construction or operations are not eligible for inclusion under B.~~3~~iii, above.

E. All areas of buildings, accessory improvements and easements used in the calculations shall be shown on the submitted Map.

2. Calculation of CIC and annual payment

A. A payment of up to a maximum of $690 per net acre (calculated above in provision b.1.C) shall be paid annually. The payment shall cover the net acreage for the entire approved Conditional Use Permit(s) regardless of phased implementation of building permits, the total number of building permits, or type of building permit issued.

B. The first annual payment is to be paid by December 31 of the year the first property tax reduction is assessed. If it is not paid by December 31 of that year, then a notice of violation of the Conditional Use Permit shall be filed and the procedure in Chapter 19.114 of the Kern County Zoning Ordinance shall commence immediately under the authority of the Planning and Natural Resources Department Director.

C. Annual payments are due every year by the anniversary date of the first payment.

D. Payments shall be made to the Planning and Natural Resources Department for transfer directly to the County Administrative Office Fiscal Division (CAO) and labeled Cumulative Impact Charge with the project name, location and APNs.

E. An advance payment option for a lump sum of all payment years, or a reduction in each year's payment for 5 or more years, may be requested by submittal of a written request to the Planning and Natural Resources Department with details of the offer no later than 60 days before the annual payment is due. A 10% discount in the lump sum amount will be applied if the advance payment option is accepted by the CAO by written response.

Section 4.15, Transportation, Page 4.15-4

7.2.1.18 Site Access

Regional access to the project would be provided by SR-14 to/from south and northeast and SR-58 to/from the northwest and east. Project-related vehicles destined for the project's southern parcel (south of the BNSF Railway) would be instructed to use the project access off Silver Queen Road. Project-related vehicles destined for the project's northern parcel (north of the BNSF Railway) would be instructed to use the project's access off SR-58. Internal access roads constructed within the project site would lead to an existing at-grade railroad crossing at the general alignment of 55th Street to allow occasional traffic between the project site that is north of the BNSF Railway and the project site that is south of the BNSF Railway.

Design and construction would adhere to applicable Kern County and Caltrans requirements and guidelines, and all necessary permits, such as encroachment permits, would be obtained. Access roads would be up to 25 feet wide and would be cleared and compacted for travel and access to the solar blocks. The site access roads would remain in place for ongoing operations and maintenance (O&M) activities after construction is completed.

The project site consists of an area north of the BNSF Railway and an area south of the BNSF Railway. Site access is described below and shown on **Figure 4.15-1**, *Project Access*. The proposed site access to the northerly project parcels would be provided by the existing unsignalized intersection at SR-58 and 45th Street/Project Site Driveway. At this intersection, the eastbound and westbound traffic flow along SR-58 is separated by an approximately 160-foot-wide center median, with dedicated left-turn and right-turn lanes provided. This configuration allows left-turn movements to and from 45th Street/Project Site Driveway to be completed in a two-stage crossing, with approximately 130 feet of vehicle storage (measured STOP line to STOP line) within the center median. As currently proposed, project site access via 45th Street/Project Site Driveway would generally be limited to the project parcels north of the railroad tracks to minimize project-related turning movements at the unsignalized intersection with SR-58. This would also minimize project-related railroad crossings between the northerly and southerly project parcels.

Section 4.18, Wildfire, Page 4.18-25

SCE Interconnection Area

As previously discussed, SCE would need to complete system upgrades to facilitate interconnection of the project to the Windhub Substation as described in **Chapter 3**, *Project Description*, **Section 3.7.6**, *SCE Interconnection Work*.

Impacts associated with SCE interconnection work would be similar to those described above for the rest of the project. SCE interconnection work would be constructed within the existing SCE Windhub Substation and a small area across Oak Creek Road that are not located on high or very high local or state severity zones. SCE would implement standard BMPs during their work on the project ~~as well as a Fire Safety Plan as required by~~ **~~Mitigation Measure MM 4.14-1~~**. SCE interconnection work is not anticipated to exacerbate fire risk or result in temporary or ongoing impacts to the environment; therefore, impacts would be less than significant.

7.3 Responses to Comments

A list of agencies and interested parties who have commented on the Draft EIR is provided below. A copy of each numbered comment letter and a lettered response to each comment are provided following this list.

Federal Agencies

None.

State Agencies

Comment Letter 1: California Department of Conservation, Geologic Energy Management Division (CalGem) (May 13, 2026)

Comment Letter 2: California Department of Transportation (Caltrans) District 9 (June 22, 2026)

Comment Letter 3: California Department of Fish and Wildlife (June 15, 2026)

Local Agencies

Comment Letter 4: Kern County Superintendent of Schools (May 15, 2026)

Comment Letter 5: Yuhaaviatam of San Manuel Nation (YSMN) (May 15, 2026)

Comment Letter 6: Kern County Fire Department (June 4, 2026)

Comment Letter 7: Southern California Gas Company (SoCalGas) (June 4, 2026)

Comment Letter 8: Twenty-Nine Palms Band of Mission Indians (June 10, 2026)

Interested Parties

Comment Letter 9: Robert K. and Kathryn M. Dyas (May 13, 2026)

Comment Letter 10: Roy Woolsey (May 29, 2026)

Comment Letter 11: Defenders of Wildlife and California Native Plant Society (June 12, 2026)

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Federal Agencies

7.3.1.1 (None)

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State Agencies

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Comment Letter 1: California Department of Conservation, Geologic Energy Management Division (CalGEM)

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May 13, 2026

VIA ELECTRONIC MAIL

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

TolentinoM@kerncounty.com

Assessor Parcel Number(s): Multiple
Project Location Address: Northern edge of the Antelope Valley, approximately 6 miles southeast of the community of Mojave, approximately 8 miles northeast of the community of Rosamond

PROJECT TITLE: Galaxy Solar PV and Storage Project by Galaxy Solar Storage

Public Resources Code (PRC) section 3208.1 establishes re-abandonment responsibility when previously plugged and abandoned oil, gas or geothermal wells will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near previously abandoned oil, gas, and geothermal wells.

A

The California Geologic Energy Management Division (CalGEM) has received the above-referenced project dated 04/30/2026. To assist local permitting agencies, property owners, and developers in making safe and practical land use decisions regarding potential development near oil, gas, or geothermal wells, CalGEM provides a table in the attached enclosure of the wells within the parcel boundary or in its vicinity, based on CalGEM's Well Finder database (https://maps.conservation.ca.gov/doggr/wellfinder/).

CalGEM categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking at the landowner's expense if there is a need to access a well. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment (consisting of well servicing rig, pumping equipment, pipe trailer) to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access

B

the well without disturbing the integrity of surrounding infrastructure. Impermeable barriers such as asphalt, concrete, and plastic may trap hazardous gases and liquids underneath and could create a safety hazard if built over a well that later develops a leak.

B Cont

CalGEM recommends that any well for which access is impeded or built over, against CalGEM's advice, should be evaluated by a qualified petroleum professional for compliance with the statutory objectives of isolating all hydrocarbon-bearing strata; protecting underground and surface waters; prevention of subsequent damage to life, health, property, and other resources; and prevention of loss of oil, gas, or reservoir energy. CalGEM recommends that wells that do not meet these standards are abandoned or re-abandoned prior to construction. The well information can be accessed through CalGEM's Well Finder database mentioned above. PRC section 3208, subdivision (a), provides the primary statutory authority for CalGEM to oversee adequate abandonment of wells. Additionally, CalGEM has developed the regulatory guidance for operators to be followed during well abandonment, which are listed within California Code of Regulation, title 14 (CCR) section 1723 and associated sub-sections (for onshore wells), and section 1745 and associated sub-sections (for offshore wells).

There is no guarantee that a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. Due to the inability to predict all subsurface conditions or changes, it always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. CalGEM acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantee that such abandoned wells will not leak.

C

CalGEM advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations in Latitude and Longitude, NAD 83 decimal format, and leak testing results should be provided to CalGEM. CalGEM expects any wells found leaking to be reported to CalGEM immediately.

PRC section 3208.1 gives CalGEM the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for re-abandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is

located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be re-abandoned, or to follow the advice of the supervisor or district deputy not to undertake construction that impedes access, then the person or entity causing the construction over or near the well shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the re-abandonment.

C Cont

Should any wells require abandonment or re-abandonment, the responsible party must submit a Notice of Intention (NOI) to CalGEM through WellSTAR. The NOI form can be accessed in the 'Plugging and Abandonment' section of the following link: https://www.conservation.ca.gov/calgem/for_operators.

No well work may be performed on any oil, gas, or geothermal well without written approval from CalGEM. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. CalGEM also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR section 1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below the surface of the ground. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from CalGEM is required before work can start.

CalGEM makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, CalGEM recommends that information regarding the below identified well(s), and any other pertinent

D

information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

2. CalGEM recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

D cont

As indicated in PRC section 3106, CalGEM has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to CalGEM's authority to order work on wells pursuant to PRC sections 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC sections 3236, 3236.5, and 3359 for violations within CalGEM's jurisdictional authority. CalGEM does not regulate grading, excavations, or other land use issues.

E

Should you have any questions, or if any wells are encountered that were not part of this letter, contact CalGEM at (661) 322-4031 or via email at CalGEMCentralCSWR@conservation.ca.gov.

Sincerely,

Emilio Flores

Emilio Flores
Office Technician

Enclosure

Enclosure: The wells listed below are reported to be located within and nearby the parcel boundary and may have future access impeded.

APN No.	API No.	Well Name
Multiple	No wells found	

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Response to Comment Letter 1: CalGEM

1-A

The comment summarizes Public Resources Code (PRC) Section 3208.1, which establishes well abandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. The comment also acknowledges receipt of the Notice of Availability of the Draft EIR on April 30, 2026, and has included a table at the end of the letter that lists wells within the parcel boundary or in its vicinity. This comment does not raise a substantive issue on the content of the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not necessary.

1-B

The comment advises against building over or in any way impeding access to oil, gas, or geothermal wells. The comment states that equipment necessary for accessing wells should be able to pass unimpeded, and that access to the well should not disturb the integrity of the surrounding infrastructure. As such, the comment advises that all wells for which access is impeded or built over, against CalGEM's advice, should be tested by a qualified petroleum professional for determining compliance with statutory objectives including, but not limited to, protecting underground and surface waters; prevention of subsequent damage to life, health, and property, and other resources; and prevention of loss of oil, gas, or reservoir energy to assess for abandonment of wells. The project site is not located within a known oil production field, nor does the project site have any known active or abandoned oil wells. This comment does not raise a substantive issue on the content of the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not necessary.

1-C

The comment acknowledges there is no guarantee that an abandoned well will not start leaking in the future, no matter how thoroughly the well was plugged and abandoned. It is advised that all wells identified in areas to be developed be tested for liquid and gas leakage, that surveys be provided to CalGEM, and that any wells found leaking be reported to CalGEM immediately.

The comment states that CalGEM has authority to order or permit the re-abandonment of a well, where it has reason to question the integrity of any previous abandonment, pursuant to PRC Sections 3208.1. The comment provides further information on PRC Section 3208.1 regarding the person or entity responsible for re-abandonment. Furthermore, the comment states that without written approval from CalGEM, no work can be performed on any oil, gas, or geothermal well. The project site is not located within a known oil production field, nor does the project site have any known active or abandoned oil wells. This comment does not raise a substantive issue on the content of the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not necessary.

1-D

The comment provides two recommendations for the proposed project: 1) information regarding the wells should be communicated to the appropriate County recorder for inclusion in the title information for the project site, and 2) any soil containing hydrocarbons should be disposed of in accordance with local, state, and federal laws. The project site is not located within a known oil production field, nor does the project site have any known active or abandoned oil wells. This comment does not raise a substantive issue on the

content of the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not necessary.

1-E

Per PRC section 3106, CalGEM has the statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells and related facilities to protect people, property, natural resources, and underground and surface waters. Additionally, CalGEM has the authority to issue civil and criminal penalties for violations within CalGEM's jurisdictional authority. CalGEM does not regulate grading, excavations, or other land use issues. This comment does not raise a substantive issue on the content of the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not necessary. The County thanks the author for their comments and participation in the public review of the document.

Comment Letter 2: Caltrans District 9

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California Department of Transportation

DISTRICT 9
500 SOUTH MAIN STREET | BISHOP, CA 93514
(760) 874-8330 | FAX (760) 872-0678 TTY 711
WWW.DOT.CA.GOV

June 22, 2026

Mark Tolentino, Planner III
Kern County Planning and Natural Resources Department
2700 "M" Street, Suite 100, Bakersfield, CA 93301
Phone: (661) 862-5041
E-mail: TolentinoM@kerncounty.com

Dear Mark Tolentino:

Caltrans District 9 has reviewed the Draft EIR and the Traffic Impact Analysis (Appendix L) for the Galaxy Solar PV & Storage Project (SCH 2025081409). The following comments are offered to ensure that transportation-related impacts are accurately disclosed and that access to the State Highway System (SHS) is designed and managed safely and effectively

A

1. Clarification of Northern Access Location (SR-58/45th Street vs. Project Site Driveway)
The TIA describes access to the northern project area at the existing unsignalized intersection of SR-58 and 45th Street, with a 160-foot median and approximately 130 feet of refuge storage for two-stage turning movements. However, the intersection operations analysis and all traffic assignment figures identify the same location as "SR-58 and Project Site Driveway" (Study Intersection #12), and 45th Street does not appear on any of the figures.
Based on the review of the TIA, Caltrans understands the applicant intended these terms to refer to the same physical access point. Galaxy must resolve the inconsistency before Caltrans can complete its review.
If "45th Street" and "Project Site Driveway" are the same location, Galaxy must revise the Final EIR and TIA to:

- Consolidate naming as "SR-58 and 45th Street (Project Site Driveway)"
- Ensure all analysis, figures, and mitigation measures consistently reference this location
- Apply all roadway safety, operational, and construction-phase traffic measures to this access point

If they are not the same location, Galaxy must:

- Identify the correct northern access point
- Provide a full operational and safety analysis for the correct location, including:
    - gap-acceptance analysis
    - heavy-truck turning-movement analysis

B

  - median refuge adequacy
  - queueing and ramp interaction
  - merge/acceleration safety for 65-mph SR-58 traffic
- Revise all traffic assignments, figures, and tables using the correct access point
- Update all relevant sections of the Draft EIR and MMRP to reflect the correction

Caltrans cannot process encroachment-related review until the true access point is identified and corrected.

B cont.

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2. Safety and Operational Evaluation Required at the Correct Northern Access Intersection

Although CEQA significance is determined using VMT rather than LOS, Caltrans requires the evaluation of operational and safety effects on the SHS. The Final EIR must include:

- A complete safety and operational assessment of the confirmed access point
- Evaluation of heavy-vehicle acceleration, deceleration, and turning behavior
- Queueing assessments, refuge adequacy (130 feet noted in the TIA), and construction-phase conflicts

C

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3. Backus Road and SR-14 Ramp Terminal Operations (Southern Project Access)

Backus Road is a principal construction access route for the southern project parcels. Appendix L identifies that during the 2027 Cumulative-Plus Project peak construction period, the SR-14 northbound and southbound off-ramp approaches to Backus Road will experience operational strain, including longer delays and queueing. While LOS is not a CEQA impact metric, these findings indicate temporary operational and safety concerns on the SHS.

Galaxy must:

- Evaluate ramp storage adequacy and queueing at both off-ramps
- Analyze heavy-vehicle turning movements and weaving interactions
- Identify any need for temporary construction-phase controls such as Portable Changeable Message Signs (PCMS), lane control, warning signage, or flagging
- Incorporate measures to minimize conflicts between construction traffic and vehicles on SR-14

The County should consider informing Caltrans District Bishop Office of all concurrent County permitted industrial scale construction projects, occurring with the SR 14 and SR 58 corridors, in Eastern Kern County. The State is concerned that the day-to-day aggregated construction-related traffic may have adverse impacts on State Highway operations.

All measures must be included in the Construction Traffic Management Plan (CTMP) and submitted as part of the Encroachment Permit process

D

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4. Encroachment Permit Requirements

Galaxy must obtain an Encroachment Permit for any work affecting SR-58 or SR-14, including:

- Driveway tie-in
- Construction staging and access
- Signage and striping
- Temporary traffic control
- PCMS installation

The CTMP must be submitted with the permit application.

E

Conclusion

To ensure safe and efficient SHS operations, Caltrans requests the correction of the northern access inconsistency, the completion of the required operational and safety evaluations, and the incorporation of all construction-phase measures into the CTMP and Final EIR.

F

Questions may be directed to the Caltrans District 9 Local Development Review Coordinator at caltrans.d09.ldr.review@dot.ca.gov.

Sincerely,

Catherine E. Carr

Catherine E. Carr
Senior Transportation Planner
Local Development Review Coordinator
Division of Planning & Environmental
Caltrans - District 9
Cell: 760-874-8318

Attachments: none

c: none

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Response to Comment Letter 2: Caltrans District 9

2-A

The comment confirms that the Draft EIR and the Traffic Impact Analysis (TIA) (**Appendix L** of the Draft EIR) have been reviewed by Caltrans. This comment does not raise a substantive issue on the content of the Draft EIR. The comments provided have been noted for the record, and no revisions to the Draft EIR are required.

It should be noted that prior to receipt of this comment letter on the content of the Draft EIR, the TIA included in the Draft EIR was previously reviewed by Caltrans and comments were received in a letter dated October 6, 2025. At that time, Caltrans acknowledged that all comments on the TIA were adequately addressed in a letter dated November 4, 2025. Nonetheless, the comments received at this time are addressed below.

2-B

The comment identifies that there is an inconsistency with the northern access point being referred to both as SR-58 and 45th Street and SR-58 and Project Site Driveway. The comment asks if "45th Street" and "Project Site Driveway" are the same location, then the name must be consolidated as "SR-58 and 45th Street (Project Site Driveway)", all analysis figures and mitigation measures must reference this location appropriately, and all roadway safety, operational, and construction-phase traffic measure must be applied to this access point. If they are not the same location, the comment requests that the correct northern access point be identified and a full operation and safety analysis for the correct location be provided. The inconsistency of the northern access point must be corrected before Caltrans can process an encroachment-related review.

References to the northern access point "45th Street" and "Project Site Driveway" are references to the same location. The naming convention will be consolidated before any encroachment permits are submitted to Caltrans, if required. The naming convention does not affect the analysis included in the Draft EIR. The Draft EIR has been revised to clarify as follows:

Section 4.15, Transportation, Page 4.15-4, Site Access

Regional access to the project would be provided by SR-14 to/from south and northeast and SR-58 to/from the northwest and east. Project-related vehicles destined for the project's southern parcel (south of the BNSF Railway) would be instructed to use the project access off Silver Queen Road. Project-related vehicles destined for the project's northern parcel (north of the BNSF Railway) would be instructed to use the project's access off SR-58. Internal access roads constructed within the project site would lead to an existing at-grade railroad crossing at the general alignment of 55th Street to allow occasional traffic between the project site that is north of the BNSF Railway and the project site that is south of the BNSF Railway.

Design and construction would adhere to applicable Kern County and Caltrans requirements and guidelines, and all necessary permits, such as encroachment permits, would be obtained. Access roads would be up to 25 feet wide and would be cleared and compacted for travel and access to the solar blocks. The site access roads would remain in place for ongoing operations and maintenance (O&M) activities after construction is completed.

The project site consists of an area north of the BNSF Railway and an area south of the BNSF Railway. Site access is described below and shown on **Figure 4.15-1**, *Project Access*. The proposed site access to the northerly project parcels would be provided by the existing unsignalized intersection at SR-58 and 45th Street/Project Site Driveway. At this intersection, the eastbound and westbound traffic flow along SR-58 is separated by an approximately 160-foot-wide center median, with dedicated left-turn and right-turn lanes provided. This configuration allows left-turn movements to and from 45th Street/Project Site Driveway to be completed in a two-stage crossing, with approximately 130 feet of vehicle storage (measured STOP line to STOP line) within the center median. As currently proposed, project site access via 45th Street/Project Site Driveway would generally be limited to the project parcels north of the railroad tracks to minimize project-related turning movements at the unsignalized intersection with SR-58. This would also minimize project-related railroad crossings between the northerly and southerly project parcels.

2-C

The comment states that although CEQA significance is determined using VMT rather than LOS, a safety and operational evaluation of the correct northern access point is requested. This includes a complete safety and operational assessment, an evaluation of heavy-vehicle acceleration, deceleration, and turning behavior, and a queueing assessment, refuge adequacy, and construction-phase conflicts.

As discussed in Comment 2-B above, references of the northern access point "45th Street" and "Project Site Driveway" are references to the same location and have been updated as shown in the response to Comment 2-B. **Mitigation Measure MM 4.15-1** would require a Construction Traffic Control Plan (CTCP) to be reviewed by Kern County Public Works Department and Caltrans to address construction traffic, including from State Route 58 at the northern access point. The CTCP will be prepared and approved to form by Caltrans in order for the project proponent to receive any necessary encroachment permits. The requested information in this comment is expected to be included in the final CTCP as it will be reviewed for completeness and adequacy at that later time. No additional mitigation measures or other revisions to the Draft EIR are required.

Mitigation Measure MM 4.15-1 is included below for reference.

MM 4.15-1: Prior to the issuance of grading or building permits, the project proponent/operator shall:

a. Prepare and submit a Construction Traffic Control Plan to Kern County Public Works Department-Development Review and the California Department of Transportation offices for District 9, as appropriate, for approval. The Construction Traffic Control Plan must be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following issues:

   1. Timing of deliveries of heavy equipment and building materials during off-peak hours to the extent feasible;

   2. Review of transport routes to determine how turns on existing roads would be accomplished and identifying intersections at which use of a flag person would be required to assist large trucks in making unobstructed turns, including from State Route 58;

   3. Placing temporary signing, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic, including along State Route 58,

4. Establish procedures for coordinating with local emergency response agencies to ensure dissemination of information regarding emergency response vehicle routes affected by construction activities;
5. Temporarily closing travel lanes or delaying traffic during materials delivery, transmission line stringing activities, or any other utility connections;
6. Maintaining access to adjacent property;
7. Encourage carpooling among workers to reduce worker commute trips entering and exiting the study area; and
8. Specifying both construction-related vehicle travel and oversize load haul routes, minimizing construction traffic during the AM and PM peak hour, distributing construction traffic flow across alternative routes to access the project sites, and avoiding residential neighborhoods to the maximum extent feasible.

b. Obtain all necessary encroachment permits for work within the road right-of-way or use of oversized/overweight vehicles that will utilize County-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Kern County Planning and Natural Resources Department and the Kern County Public Works Department-Development Review.

c. Enter into a secured agreement with Kern County to ensure that any County roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the State and/or Kern County.

d. Submit documentation that identifies the roads to be used during construction. The project proponent/operator shall be responsible for repairing any damage to non-County maintained roads that may result from construction activities. The project proponent/operator shall submit a preconstruction video log and inspection report regarding roadway conditions for roads used during construction to the Kern County Public Work Department-Development Review and the Kern County Planning and Natural Resources Department.

e. Within 30 days of completion of construction, the project proponent/operator shall submit a post-construction video log and inspection report to the County. This information shall be submitted in electronic format. The County, in consultation with the project proponent/operator's engineer, shall determine the extent of remediation required, if any.

2-D

The comment notes that the TIA identifies that during the 2027 Cumulative-Plus Project peak construction period, the SR-14 northbound and southbound off-ramp approaches to Backus Road will experience operational strain. Although LOS is not a CEQA impact metric, the comment requests an evaluation of ramp storage adequacy and queueing at both off-ramps, analysis of heavy-vehicle turning movements and weaving interactions, identification of any need for temporary construction-phase controls such as portable, changeable message signs, lane control, warning signage or flagging, and incorporation of conflict minimization measures for construction traffic and vehicles on SR-14. Measures must be included in the CTCP and submitted as part of the Encroachment Permit process.

As described in the Draft EIR and TIA (**Appendix L** of the Draft EIR), the SR-14 northbound and southbound off-ramp approaches to Backus Road would operate below capacity with manageable queues albeit with longer delays (LOS E or LOS F) during peak hours. However, this is a temporary condition during the project's peak construction phase with other area background projects (Cumulative Projects). Without the other Cumulative Projects (Existing plus Project), these movements operate with less delay at LOS C. Furthermore, the project will generate significantly fewer trips during the other phases of the project's construction and negligible peak hour trips during the project's long-term O&M phase. When addressing construction-related traffic, implementation of **Mitigation Measure MM 4.15-1** would nonetheless require coordination and consultation with Caltrans in order to prepare a Construction Traffic Control Plan to be reviewed and approved as to form by both Kern County Public Works Department. No additional mitigation measures or other revisions to the Draft EIR are required.

2-E

The comment notes that an encroachment permit for any work affecting SR-58 or SR-14 must be obtained and the CTCP must be submitted with the permit application.

As described in the TIA (**Appendix L** of the Draft EIR) and in **Mitigation Measure MM 4.15-1**, a CTCP will be prepared to minimize potential project-related traffic impacts. The CTCP will include variable message boards and additional signage along SR-58 alerting motorists of the increased truck turning activity in the vicinity of the site and to watch for slow moving traffic. The CTCP will also include Travel Demand Management measures to encourage non-single occupancy vehicle trips and minimize reliance on single-occupant vehicles and reduce single occupancy vehicle trips to and from the project site. The CTCP will be reviewed and approved by Caltrans and the County prior to receiving an encroachment permit. The approved CTCP will be included with the submittal of the encroachment permit application. This comment does not raise a substantive issue on the content of the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not necessary.

2-F

The comment concludes by summarizing the requests for the correction of the northern access inconsistency, the completion of the required operational and safety evaluations, and the incorporation of all construction-phase measures into the CTCP and Final EIR. This comment does not raise a substantive issue on the content of the Draft EIR. The comment has been noted for the record, and further revisions to the Draft EIR are not necessary. The County thanks the author for their comments and participation in the public review of the document.

Comment Letter 3: California Department of Fish and Wildlife

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STATE OF CALIFORNIA
DEPARTMENT OF FISH AND WILDLIFE

GAVIN NEWSOM, Governor
MEGHAN HERTEL, Director

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Fresno, California 93710
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June 15, 2026

Mark Tolentino, Planner III
Kern County Planning and Natural Resources Department
2700 "M" Street, Suite 100
Bakersfield, California 93301
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TolentinoM@kerncounty.com

Subject: Galaxy Solar PV and Storage Project (Project)
Draft Environmental Impact Report (DEIR)
State Clearinghouse No. 2025081409

Dear Mark Tolentino:

The California Department of Fish and Wildlife (CDFW) received a DEIR from Kern County (County) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

A

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statue for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on

B

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code may be required.

B cont.

Nesting Birds: CDFW has jurisdiction over actions with the potential to result in the disturbance or destruction of active nest sites or unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs, or nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T, as specified in the CEQA Guidelines section 15380, CDFW recommends it be fully considered in the environmental analysis for the Project.

PROJECT DESCRIPTION SUMMARY

Proponent: Galaxy Solar Storage, LLC (Terra-Gen)

Objective: The Project proposes to construct a photovoltaic (PV) solar facility with associated infrastructure necessary to generate up to 600 megawatts (MW) of renewable electrical energy with up to 4 gigawatt-hours (GWh) (approximately 1,000 MW) of energy storage capacity on an approximate 3,400-acre Project site. Project infrastructure includes an operations and maintenance (O&M) facility, telecommunication facilities, energy storage system(s), an onsite collector substation, a 230-kV switchyard, and offsite water storage tanks. The proposed Project also includes an approximately 16-mile generation-tie (gen-tie) line, on poles of a maximum height of 250 feet, to connect the Project to the existing Southern California Edison (SCE) Windhub Substation.

C

Location: The proposed Project site is located across 162 privately owned parcels in Kern County at the northern edge of the Antelope Valley. The site is approximately 6 miles southeast of the community of Mojave, approximately 8 miles northeast of the community of Rosamond, and approximately 8 miles northwest of the main base of Edwards Air Force Base. The proposed Project is located within the Bissell and Sanborn U.S. Geological Survey 7.5-minute quadrangles, and spans multiple

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Townships, Ranges, and Sections including the following: Townships 10 and 11 North, Range 11 West, and Sections 3, 4, 8, 9, 28, and 32-34. Portions of the Project are located just south of State Route 58 and on both sides of the Burlington Northern Santa Fe Railway.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the Final Environmental Impact Report (FEIR). CDFW previously submitted comments regarding the Project in response to the Notice of Preparation of the DEIR in a letter dated October 6, 2025 (NOP Comment Letter; Attachment 1). C cont.

As stated in the DEIR, the Project site is relatively flat with elevations ranging between 2,460 and 2,900 feet above mean sea level. Desert vegetation dominates the regional landscape of the site and includes cheonopod scrub and Mojavean desert scrub, with allscale scrub as the dominant vegetation community. A number of biological technical studies were conducted in support of the DEIR, and the DEIR identifies several special-status species that could potentially be impacted by the Project.

Western Joshua Tree

Notably, the DEIR concludes that impacts to the State candidate western Joshua tree (*Yucca brevifolia*; WJT) would be significant and unavoidable due to the large number of WJT expected to be impacted by the Project. Under CESA, species classified as candidate species are afforded the same protection as CESA-listed species. Take of any CESA listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). The Western Joshua Tree Conservation Act (WJTCA), enacted by the California state legislature in 2023, aims to provide protection of WJT and provides another permitting mechanism for the incidental take of WJT. Given the significance determination identified by the County in the DEIR, the substantial Project-related impacts that are anticipated to occur to the species, and the protections afforded to the species under CESA and WJTCA, CDFW strongly recommends the Project proponent consult with CDFW early in the planning process and obtain appropriate take authorization for WJT. D

The DEIR provides Mitigation Measure (MM) 4.4-8, other biological mitigation measures, and Project design features to avoid, preserve, and minimize impacts to WJT. MM 4.4-8 requires the Project proponent to consult with CDFW regarding the take of WJT and comply with all avoidance, minimization, and mitigation measures detailed in any Incidental Take Permit (ITP) issued to the Project. It also requires the proponent to submit documentation to the County confirming development of a Joshua Tree

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Preservation Plan, which must include how the Project plans to relocate a minimum of 900 onsite WJT to onsite or offsite lands.

CDFW concurs with the portion of MM 4.4-8 requiring consultation with CDFW and compliance with an ITP. Take authorization through the acquisition of an ITP pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA. Alternatively, the Project may obtain take authorization through issuance of a Western Joshua Tree Conservation Act ITP pursuant to Fish and Game Code section 1927.3. CDFW would like to highlight the potential challenges regarding the feasibility of relocating 900 WJT, a number which is higher than known project-related WJT relocation efforts to date. CDFW recommends the Project proponent closely coordinate with CDFW on relocation efforts, as appropriate avoidance, minimization, and mitigation would also need to be determined by CDFW as part of the CESA or WJTCA permitting process. CDFW notes that, under CESA and WJTCA, impacts to WJT must be fully mitigated. CDFW reiterates the importance of early and extensive coordination with CDFW given the significant impacts on WJT anticipated for the Project and potential mitigation issues detailed above.

D cont.

Additional Special-Status Species

The DEIR evaluates the Project's potential impacts on several additional special-status species whose geographic ranges overlap the Project site and concludes impacts to these species would be less than significant, either with or without mitigation incorporated. Accordingly, the DEIR proposes multiple mitigation measures to reduce the Project's impacts on special-status species to a less-than-significant level.

According to the DEIR, the State endangered and federally threatened desert tortoise (*Gopherus agassizii*) and the State candidate western burrowing owl (*Athene cunicularia hypugaea*) are present on the Project site. CDFW recommends the Project proponent consult with CDFW to discuss how to implement the Project and avoid take. If take of any of these species cannot be avoided,take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), is necessary to comply with CESA.

E

CDFW has concerns about the ability of some of the DEIR's proposed mitigation measures to reduce impacts to less than significant and avoid unauthorized take for several special-status animal and plant species. These species include the State threatened Mohave ground squirrel (*Xerospermophilus mohavensis*) and Swainson's hawk (*Buteo swainsonii*); the State candidate LeConte's thrasher (*Toxostoma lecontei*), western burrowing owl, and Crotch's bumble bee (*Bombus crotchii*); the State species of special concern American badger (*Taxidea taxus*); the State protected furbearing mammal desert kit fox (*Vulpes macrotis arsipus*); and the California Rare Plant Rank (CRPR) 1B.2 alkali mariposa lily (*Calochortus striatus*).

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Mohave Ground Squirrel

The DEIR concludes that Mojave ground squirrel (MGS) has the potential to be present within the Project site based on recent occurrence data and a habitat suitability assessment conducted in support of the DEIR, which identified moderate to low/moderate quality MGS habitat within the site. It is CDFW's understanding that focused/protocol MGS surveys have not been completed for the Project. The DEIR provides MM 4.4-19 to mitigate the Project's impacts on MGS, which requires the Project to conduct preconstruction surveys for small mammals, including MGS, within suitable habitat 14 days prior to ground disturbance. If MGS is detected on the Project site, MM 4.4-19 requires the proponent to halt work, report the sighting to CDFW, and prepare a Mohave Ground Squirrel Avoidance and Monitoring Plan, which must include avoidance of MGS by a minimum of 50 feet. If avoidance of MGS is not feasible, MM 4.4-19 requires the proponent to consult with CDFW regarding take authorization.

CDFW concurs with the portions of MM 4.4-19 requiring avoidance of MGS and consultation with CDFW if MGS is detected on the Project site. However, as the Project's habitat assessment identified suitable MGS habitat within the Project site, CDFW asserts that protocol-level surveys for MGS are necessary to detect any MGS that may be present on the site and avoid potentially significant impacts on the species, as opposed to surveys conducted 14 days prior to ground disturbance which may not detect the species even if present. Alternatively, the Project proponent could consult with CDFW prior to conducting these surveys to discuss how to implement the Project and avoid take. If take of any of these species cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), is necessary to comply with CESA. As such, CDFW reiterates the recommendations in the NOP Comment Letter and recommends the FEIR include the following additional measure: F

> **Recommended Mitigation Measure 1: MGS Protocol Surveys**
>
> CDFW recommends that a qualified permitted biologist conduct protocol surveys for MGS following the methods described in the "Mohave Ground Squirrel Survey Guidelines" (CDFW 2023a) during the appropriate survey season prior to Project implementation, including any vegetation or ground disturbing activities. Results of the MGS surveys are recommended to be submitted to CDFW. Please note MGS surveys are valid for one year and CDFW recommends surveys be conducted within a year of the start of ground-disturbing activities.

Swainson's Hawk

Swainson's hawk (SWHA) nesting surveys were conducted in support of the DEIR in accordance with the Swainson's Hawk Survey Protocols, Impact Avoidance, and G

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Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California (SWHA Survey Protocols; California Energy Commission 2010). While no SWHA nests were observed within the Project site, suitable nesting and foraging habitat is present on the site according to the DEIR. The DEIR provides MM 4.4-13 to mitigate for SWHA impacts, which requires the Project to complete preconstruction surveys following the SWHA Survey Protocols within 30 days prior to the start of construction if activities are scheduled to begin during the SWHA nesting season. If a nesting SWHA is detected, MM 4.4-13 requires a 0.5-mile avoidance buffer to be established around the nest. MM 4.4-13 also requires the proponent to mitigate the loss of any moderate quality SWHA foraging habitat within a 5-mile radius of active SWHA nest(s) at up to a 0.5:1 ratio. Lastly, if avoidance of an active nest is infeasible, MM 4.4-13 requires the proponent to consult with CDFW regarding take authorization.

G cont.

Please be advised that CDFW considers a nest active if it was used one or more times within the last 5 years. CDFW concurs with the portions of MM 4.4-13 requiring protocol SWHA preconstruction surveys, but recommends these surveys follow the Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California (SWHA Survey Protocol; California Energy Commission 2010) protocol if construction is anticipated to begin during the SWHA nesting season. CDFW also concurs with the portion of MM 4.4-13 that requires establishment of an avoidance buffer, and consultation with CDFW. However, CDFW does not concur with the proposed mitigation ratio for the loss of SWHA foraging habitat. CDFW recommends the FEIR incorporate the following measure:

Recommended Mitigation Measure 2: SWHA Foraging Habitat Mitigation

CDFW recommends compensation for the loss of SWHA foraging habitat as described in the SWHA Survey Protocols to reduce impacts to foraging habitat to less than significant. The SWHA Survey Protocols recommend that loss of SWHA foraging habitat be mitigated by providing habitat management (HM) lands within the Antelope Valley SWHA breeding range at a minimum 2:1 ratio for such habitat impacted within a 5-mile radius of active SWHA nest(s). CDFW considers a nest active if it was used one or more times within the last 5 years.

Le Conte's Thrasher

The California Fish and Game Commission approved Le Conte's thrasher (LETH) as a candidate for potential listing as a protected species under CESA on April 16, 2026, and published these findings in the California Regulatory Notice Register on April 29, 2026. Therefore, LETH is now a candidate under CESA and receives the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085).

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The DEIR concludes that there is moderate potential for LETH to forage and nest within the Project site, and no species-specific measures are incorporated in the DEIR. As LETH may occur on the site, significant impacts to LETH may occur without mitigation, especially considering the species' recent change in CESA status. As such, CDFW recommends the FEIR include the following measures:

Recommended Mitigation Measure 3: LETH Preconstruction Surveys

CDFW recommends that a qualified biologist conduct for surveys assessing presence/absence of LETH (individuals and nests) on the Project site, as well as a 500-foot buffer surrounding the Project site during the survey season immediately prior to construction. CDFW recommends these surveys be conducted in coordination with CDFW to assist with determining an appropriate survey methodology.

H cont.

Recommended Mitigation Measure 4: LETH Avoidance and Consultation

Should a LETH nest or occupied habitat (i.e., territory) be detected, either during pre-construction surveys or construction activities, CDFW recommends that a 500-foot no-disturbance buffer be implemented around these areas and consultation with CDFW occur to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), is necessary to comply with CESA.

Western Burrowing Owl

According to the DEIR, western burrowing owl (BUOW) was documented within the Project site and suitable nesting and foraging habitat is located throughout the Project site and vicinity. The DEIR provides MM 4.4-11 to mitigate Project impacts to BUOW, which requires that a qualified biologist conduct preconstruction surveys following the 2012 Staff Report on Burrowing Owl Mitigation (2012 Staff Report; CDFG 2012). MM 4.4-11 also requires establishment of no-disturbance buffers following the 2012 Staff Report and details the process of den excavation for potential, known, and occupied burrows. CDFW concurs with the portions of MM 4.4-11 pertaining to surveys and avoidance; however, CDFW does not concur with the approach for den designation (i.e., potential, known, occupied) and excavation. MM 4.4-11 notes that, "An established burrowing owl burrow no-disturbance buffer may be removed once the burrowing owl(s) is/are no longer using the burrow (redesignated as a potential burrow)" and that, "If potential burrowing owl burrows are detected any time of year, burrows may be excavated under the direct supervision of the Lead Biologist(s) without prior camera monitoring." This portion of MM 4.4-11 insinuates that known burrowing owl dens would be able to be excavated at any time of year once a qualified biologist determines the den is no longer occupied. CDFW does not concur with this approach and is concerned that excavation of recently occupied burrows would have a

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strong potential to result in significant impacts to the species and potentially unauthorized take absent an ITP. As such, CDFW recommends that, in the event a BUOW individual or known BUOW den (active or inactive) is detected, and the no-disturbance buffers outlined in the 2012 Staff Report are not feasible, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), is necessary to comply with CESA.

I cont.

Crotch's Bumble Bee

According to the DEIR, Crotch's bumble bee (CBB) has a high potential to forage and moderate potential to nest on the Project site. The DEIR provides MM 4.4-18 to mitigate Project impacts on CBB, which requires preconstruction surveys for CBB following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023b). If active CBB nests are detected, the measure requires establishment of a 50-foot no-disturbance buffer around the nest and, once the nest is determined to be inactive, allows Project activities in the buffer to resume. Lastly, MM 4.4-18 requires the proponent to consult with CDFW regarding take authorization if avoidance of an active CBB nest is infeasible.

CDFW concurs with the portion of MM 4.4-18 requiring preconstruction surveys for CBB. However, due to the difficulty of locating all CBB nests in a given area, if nesting or foraging CBB is detected, immediate consultation with CDFW is recommended to establish an appropriate avoidance area and ensure Project-related activities would avoid unauthorized take absent an ITP. As such, CDFW recommends the FEIR include the following measures:

J

Recommended Mitigation Measure 5: CBB Avoidance and Consultation

If CBB is detected, CDFW recommends that all small mammal burrows and thatched/bunch grasses be initially avoided by a minimum of 50 feet to avoid take and potentially significant impacts until CDFW can be consulted regarding an appropriate avoidance area. Any detection of CBB prior to or during construction warrants consultation with CDFW to discuss how to avoid take, regardless of time of year.

Recommended Mitigation Measure 6: CBB Take Authorization

If take of CBB cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), is necessary to comply with CESA.

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American Badger and Desert Kit Fox

Both American badger (AMBA) and desert kit fox (DKF) have a high potential to occur within the Project site according to the DEIR. During biological surveys conducted in support of the DEIR, AMBA sign as well as one DKF individual and numerous DKF dens were observed. The DEIR provides MM 4.4-12 to mitigate Project impacts on AMBA and DKF, which requires the lead biologist to evaluate the status of any dens found during preconstruction surveys. MM 4.4-12 prohibits construction activities within 50 feet of any active AMBA dens and 100 feet of any active DKF dens. However, MM 4.4-12 allows collapse of dens that are determined to be inactive, apparently during any time of year.

CDFW concurs with the portion of MM 4.4-12 prohibiting Project activities within 50 feet and 100 feet of active AMBA and DKF dens, respectively. However, CDFW does not recommend collapsing any known dens (i.e., any dens that are currently used or have been used at any time in the past) during the pupping season, even if they are determined to be inactive at any given time. Both American badger and kit foxes change dens often, including during the pupping season. As such, CDFW recommends the FEIR include the following measure: K

> **Recommended Mitigation Measure 7: AMBA/DKF Dens Collapse Consultation**
>
> CDFW recommends prohibiting collapse of any known AMBA or DKF den, whether it is determined to be active or inactive, during the respective pupping seasons for each species. CDFW also recommends that collapse of any known AMBA or DKF dens occur in consultation with CDFW.

Alkali Mariposa Lily

During botanical surveys conducted in support of the DEIR, approximately 31,647 alkali mariposa lily (AML) individuals were documented within the Project site. The DEIR provides MM 4.4-6 to mitigate Project impacts to AML, which requires the proponent to prepare a Habitat Mitigation Plan for AML if the Project would eliminate (i.e., permanently impact) more than 10% of the local population. The Habitat Mitigation Plan would include identification of locations on- or off-site where AML would be preserved, restored, or enhanced; methods for preservation, restoration, enhancement, and/or translocation; an appropriate replacement/mitigation ratio; a 5-year monitoring program; adaptive management and remedial measures; and financial assurances and a mechanism for conserving mitigation lands in perpetuity, among other components. L

The DEIR specifically limits permanent impacts on AML to areas where impermeable surfaces would be installed or where ongoing vegetation clearing would be needed (e.g., interior roads, areas around the BESS facility, etc.). Conversely, the DEIR

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describes temporary impacts on AML as those occurring where Project activities will temporarily disturb the ground surface (e.g., grading, mowing), including areas underneath the solar arrays. As a result, the DEIR determines approximately 3.7–3.9% of AML individuals would be permanently impacted, while 65.2–88.3% of individuals would be temporarily impacted, and concludes that the overall permanent impact of the Project on the local AML population is anticipated to be low and well below the 10% threshold identified in MM 4.4-6.

CDFW does not concur with the DEIR's conclusions pertaining to AML. In arid desert environments, CDFW often considers construction and operations-related disturbances, including the type of ground and vegetation disturbance necessary to install and maintain solar arrays, to have the potential to result in permanent impacts to special-status species, including special-status plants. Thus, based on the information provided in the DEIR, CDFW concludes that Project impacts on AML are potentially significant and recommends the following:

Recommended Mitigation Measure 8: AML Habitat Mitigation Plan

CDFW recommends the Project implement MM 4.4-6 and prepare a Habitat Mitigation Plan for AML. CDFW recommends removing the 10% threshold from the measure. It is recommended that the Habitat Mitigation Plan be developed in coordination with CDFW.

L cont.

Recommended Mitigation Measure 9: AML Avoidance

CDFW recommends the Project avoid AML to the greatest extent feasible by delineating and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population or specific habitat type required by AML. CDFW recommends these buffers be implemented in areas that would not be directly impacted by Project activities.

Further, given the large number of AML individuals anticipated to be impacted by the Project and to better inform the development of the Habitat Mitigation Plan, CDFW asserts that a more thorough analysis of potential impacts to AML is warranted in the FEIR. CDFW recommends the FEIR provide a detailed description of the type and intensity of ground disturbance in areas where AML is present, an evaluation of how solar arrays are expected to alter physical characteristics underneath and around them (i.e., sunlight, moisture, etc.), and a comprehensive analysis of the anticipated effects of Project activities and infrastructure on AML based on the species' specific habitat requirements. CDFW notes, for instance, that bulldozing has been shown to create unfavorable soil conditions for desert plants and increase colonization of invasive grasses compared to mowing (Grodsky et al. 2020); and installation of solar panels creates shade, diverts runoff, and may result in altered microhabitats surrounding the panels, which has had varied effects on desert vegetation depending on the plant community and soil characteristics (Tanner et al. 2020).

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Editorial Comments and/or Suggestions

Wildlife Friendly Fencing: The DEIR includes MM 4.4-4 (p.) to facilitate wildlife movement and permeability through the Project site. MM 4.4-4 (p.) states that, "To enable kit foxes and other wildlife (e.g., American badger) to pass through the project site after construction, the permanent perimeter security fence shall be a wildlife friendly design that meets the goals of allowing wildlife to move freely through the project site during operation, leaving 4- to 7-inch openings or portals in the fence or the fence shall be raised 4 to 7 inches above the ground leaving a gap between the fence mesh and the ground. In the latter case the bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that passes under the fence." CDFW concurs with incorporating wildlife friendly fencing as part of the final Project design but does not concur with allowing the use of portals in lieu of having perimeter fencing with a continuous gap. The use of portals would increase the potential for predation as species such as DKF attempt to escape predators and need to move quickly through the Project boundary. As such, CDFW recommends that perimeter fencing be designed to allow for passage of small and medium-sized wildlife, while impeding the passage of larger predators such as coyotes. Perimeter fencing should be installed with a four (4) to six (6) inch gap from the bottom of the fencing material and knuckled back to form a smooth edge and allow permeability for wildlife. Perimeter fencing should have this gap installed continuously along the bottom of all perimeter fencing (i.e., permeable portals should not be utilized). M

Cumulative Impacts: Currently, the DEIR has a very broad analysis of cumulative impacts to biological resources and does not adequately evaluate impacts to specific resources. As such, the conclusions reached in the cumulative impacts analysis are not supported by substantial evidence, and the analysis lacks sufficient rigor and transparency to adequately develop reasonable and feasible measures to reduce harm. This is especially concerning given the DEIR's finding that cumulative impacts on biological resources would be significant and unavoidable. To address this, CDFW recommends that the FEIR conduct a cumulative impact analysis for all specific biological resources that will either be significantly or potentially significantly impacted by implementation of the Project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining health and will be impacted by the Project, even if those impacts are relatively small (i.e., less than significant). CDFW recommends cumulative impacts be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and be focused specifically on the resource, not the Project. An appropriate resource study area should be identified and mapped for each resource being analyzed and utilized for this analysis. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA. N

Lake and Streambed Alteration: The DEIR identifies 40 stream and/or hydrologic features within the Project site, totaling 17.92 acres and 74,468 linear feet, that may be O

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subject to CDFW jurisdiction. The DEIR also provides MM 4.4-23, which requires the Project proponent to consult with CDFW and notify prior to impacting these features. CDFW concurs with MM 4.4-23 and notes that Project activities that will substantially change or use any material from the bed, bank, and channel of any river, stream, or lake are subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit or dispose of debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial and may include those that are highly modified such as canals and retention basins.

O cont.

CDFW is required to comply with CEQA prior to issuance of a Final Lake or Streambed Alteration Agreement (LSAA); therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for Final LSAA issuance. For information on notification requirements, please refer to CDFW's website (https://wildlife.ca.gov/Conservation/LSA) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593.

CNDDB: Please note that the California Natural Diversity Database (CNDDB) is populated by records through voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDB but where there is suitable habitat features capable of supporting species. A lack of an occurrence record in the CNDDB does not mean a species is not present. To adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified biologist during the appropriate survey period(s) using the appropriate protocol survey methodology are warranted to determine whether any special-status species are present at or near the Project site.

P

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNDDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to the CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to the CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

Q

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FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089). R

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist the County in identifying and mitigating Project impacts on biological resources. Please see the enclosed Mitigation Monitoring and Reporting Program (MMRP) table (Attachment 2) which corresponds with the recommended mitigation measures in this comment letter. If you have any questions, please contact Amanda Canepa, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, by telephone at (805) 746-0721, or by electronic mail at Amanda.Canepa@wildlife.ca.gov. S

Sincerely,

DocuSigned by:
Julie Vance
FA83F09FE08945A...

Julie A. Vance
Regional Manager

Attachment 1 (NOP Comment Letter)
Attachment 2 (MMRP)

ec: State Clearinghouse
Land Use and Climate Innovation
state.clearinghouse@lci.ca.gov

Amanda Canepa
California Department of Fish and Wildlife

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Attachment 1
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
NOP COMMENT LETTER

PROJECT: Galaxy Solar PV and Storage Project by Galaxy Solar PV and Storage, LLC

SCH No.: 2025081409

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

October 6, 2025

Mark Tolentino, Planner III
Kern County
Planning and Natural Resources Department
2700 "M" Street, Suite 100
Bakersfield, California 93301
(661) 862-5041
TolentinoM@kerncounty.com

Subject: Galaxy Solar PV and Storage Project (Project)
Notice of Preparation (NOP)
State Clearinghouse No. 2025081409

Dear Mark Tolentino:

The California Department of Fish and Wildlife (CDFW) received a NOP from Kern County (County) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statue for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code may be required.

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians and reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows:

- Take is necessary for scientific research,
- Efforts to recover a fully protected, endangered, or threatened species, live capture, and relocation of a bird species for the protection of livestock, or
- They are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

Additionally, specified types of infrastructure projects may be eligible for an Incidental Take Permit (ITP) for unavoidable impacts to fully protected species if certain conditions are met (see Fish & G. Code §2081.15). Early consultation with CDFW is recommended if an ITP for fully protected species may be pursued for this Project.

Nesting Birds: CDFW has jurisdiction over actions with the potential to result in the disturbance or destruction of active nest sites or unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs, or nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T, as specified in the CEQA Guidelines section 15380, CDFW recommends it be fully considered in the environmental analysis for the Project.

PROJECT DESCRIPTION SUMMARY

Proponent: Galaxy Solar Storage, LLC (Terra-Gen)

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Objective: The Project proposes to construct a photovoltaic (PV) solar facility with associated infrastructure necessary to generate up to 600 megawatts (MW) of renewable electrical energy with up to 4 gigawatt-hours (GWh) (approximately 1,000 MW) of energy storage capacity on an approximate 3,400-acre Project site. Project infrastructure includes an operations and maintenance (O&M) facility, telecommunication facilities, energy storage system(s), an onsite collector substation, and a temporary laydown yard. The proposed Project also includes an approximately 10 mile generation-tie (gen-tie) line, on poles of a maximum height of 250 feet, to connect the Project to the existing Southern California Edison (SCE) Windhub Substation and a tap station or switchyard.

Location: The proposed Project site is located in Kern County at the northern edge of the Antelope Valley, approximately 6 miles southeast of the community of Mojave, approximately 8 miles northeast of the community of Rosamond, and approximately 8 miles northwest of the main base of Edwards Air Force Base. The proposed project is located within the Bissell and Sanborn U.S. Geological Survey 7.5-minute quadrangles, and spans multiple Townships, Ranges, and Sections including the following: Townships 10 and 11 North, Range 11 West, and Sections 3, 4, 8, 9, 28, and 32-34. Portions of the Project is located just south of State Route 58 and on both sides of the Burlington Northern Santa Fe Railway.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the Draft Environmental Impact Report (DEIR) prepared for this Project.

As stated in the NOP, the proposed Project site is relatively flat, undeveloped land in the Mojave Desert within the Antelope Valley, with site elevation ranging between 2,460 and 2,900 feet above sea level. Desert vegetation dominates the regional landscape of the proposed Project area and includes Mojave desert scrub (creosote bush scrub, cheesebush scrub, and Joshua tree woodland alliances) and non-native grassland. Based on a review of the Project description, California Natural Diversity Database (CNDDB) records, and aerial imagery of the Project site and surrounding habitat, the Project is within the geographic range of and could potentially impact several special-status animal species including, but not limited to, the State endangered and federally threatened desert tortoise (*Gopherus agassizii*); the State threatened Mohave ground squirrel (*Xerospermophilus mohavensis*) and Swainson's hawk (*buteo Swainsonii*); the State fully protected golden eagle (*Aquila chrysaetos);* the State candidate western burrowing owl (*athene cunicularia hypugaea)* and Crotch's bumblebee (*bombus crotchii)*; the State species of special concern American badger (*Taxidea taxus*), Townsend's big-eared bat (*Corynorhinus townsendii*), Le Conte's thrasher (*Toxostoma*

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lecontei), loggerhead shrike (*Lanius ludovicianus*), long-eared owl (*Asio otus*), and short-eared owl (*Asio flammeus*); the State watch list prairie falcon (*Falco mexicanus*) and California horned lark (*Eremophila alpestris actia*); and the State protected furbearing mammal desert kit fox (*Vulpes macrotis arsipus*).

The Project is also within the geographic range of several special-status plant species, including, but not limited to, the State candidate western Joshua tree (*Yucca brevifolia*); the CRPR 1B.1 Horn's milk-vetch (*Astragalus hornii var. hornii*) and pale-yellow layia (*Layia heterotricha*); the CRPR 1B.2 alkali mariposa lily (*Calochortus striatus*), Barstow woolly sunflower (*Eriophyllum mohavense*), recurved larkspur (*Delphinium recurvatum*), Latimer's woodland-gilia (*Saltugilia latimeri*) and desert cymopterus (*Cymopterus deserticola*); and the CRPR 1B.3 southern Sierra monardella (*Monardella linoides ssp. anemonoides*) and Tehachapi mondardella (*Monardella linoides ssp. Oblonga*).

To support the adequate assessment of potential impacts to biological resources in the DEIR, CDFW recommends that a qualified biologist perform relevant database reviews and other research of the Project site and surrounding area, then conduct focused habitat assessments and/or focused biological surveys during the appropriate survey period(s) in order to determine whether any special-status species may be present within the Project site.

CDFW recommends this initial work be documented within the DEIR and used to inform further efforts that may be needed thereafter including the need for additional protocol surveys and/or the development of avoidance, minimization, and/or mitigation measures. This information and analysis may then be used in the DEIR to consider the development of modified or new Project alternatives to avoid and minimize potentially significant environmental impacts on the biological environment. This information is critical to make an informed decision during the CEQA process and to ensure Project compliance with CESA, Fish and Game Code, and other applicable State and federal laws and regulations.

Desert Tortoise

The Project site is within the known geographic range of desert tortoise (DT) and there are multiple historical occurrences within the Project site and surrounding area (CDFW 2025). DT are most common in desert scrub, desert wash, and Joshua tree habitats (CDFW 2018a). Based on aerial imagery, the Project site consists almost entirely of desert scrub communities which have the potential to support DT. CDFW recommends that protocol DT surveys be conducted following the protocol contained in "Preparing for any action that may occur within the range of the desert tortoise (*Gopherus agassizii*)" (USFWS 2019) as part of the biological studies conducted in support of the DEIR. Survey results should be submitted to CDFW. If an individual DT or potential DT burrow is detected, consultation with CDFW is recommended for guidance on how to implement the Project and avoid take of the species or for guidance on obtaining an

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Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b).

Mohave Ground Squirrel

The Project site is within the historic range of Mojave ground squirrel (MGS) and there are multiple occurrences within the Project site and surrounding area (CDFW 2025). Suitable MGS habitat includes all broadly described plant communities in the western Mojave Desert including saltbush scrub, creosote bush scrub, western Joshua tree woodland, and sagebrush scrub (Gustafson 1993). Based on aerial imagery, the Project site consists almost entirely of desert scrub communities which may have the potential to support MGS.

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of the biological technical studies conducted in support of the DEIR. If potentially suitable habitat is identified, CDFW recommends that a qualified biologist conduct focused surveys for MGS following the methods described in the Mohave Ground Squirrel Survey Guidelines (CDFW 2023a). Because of the large size of the Project site, CDFW recommends that the Project applicant propose a surveying methodology for CDFW review and approval prior to initiation of protocol surveys. It is also recommended that the results of these surveys be submitted to CDFW for evaluation. If an individual MGS or MGS burrow is detected, consultation with CDFW is recommended for guidance on how to implement the Project and avoid take of the species or for guidance on obtaining an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

Swainson's Hawk

The Project is within the known geographic range of Swainson's hawk (SWHA). SWHA are known to travel for miles to forage, exhibit high nest-site fidelity year after year, and lack of suitable nesting habitat in the Antelope Valley and the Kern County portion of the Mohave Desert limits their local distribution and abundance (CDFW 2016). Based on aerial imagery, the Project site and adjacent areas may contain suitable habitat for SWHA nesting and foraging.

As SWHA have the potential to use the Project site, CDFW recommends that a qualified biologist conduct surveys for nesting SWHA following the Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California (SWHA Survey Protocol; California Energy Commission 2010) as part of the biological technical studies conducted in support of the DEIR.
In addition to conducting SWHA surveys, CDFW recommends the DEIR include the following minimization measures:

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Recommended Mitigation Measure 1: SWHA Surveys Prior to Construction

Depending on the time between the initial survey efforts conducted in support of the DEIR and Project construction, CDFW recommends that additional surveys, following the SWHA Survey Protocol, be repeated the survey season immediately prior to construction.

Recommended Mitigation Measure 2: SWHA Avoidance Buffer

If Project-specific activities will take place during the SWHA nesting season (i.e., March 1 through September 15), and active SWHA nests are present, CDFW recommends a minimum 0.5-mile no-disturbance buffer be delineated and maintained around each nest, regardless of whether it was detected by surveys or observed incidentally. These buffers would remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, to prevent nest abandonment and other take of SWHA as a result of Project activities.

Recommended Mitigation Measure 3: SWHA Take Authorization

In the event an active SWHA nest is detected, and a 0.5-mile no-disturbance buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), is necessary to comply with CESA.

Recommended Mitigation Measure 4: Loss of SWHA Foraging Habitat

CDFW recommends compensation for the loss of SWHA foraging habitat as described in the Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California (California Energy Commission 2010) to reduce impacts to foraging habitat to less than significant. The SWHA survey protocol recommends that plans for mitigating loss of SWHA foraging habitat be mitigated by providing HM lands within the Antelope Valley SWHA breeding range at a minimum 2:1 ratio for such habitat impacted within a five-mile radius of active SWHA nest(s). CDFW considers a nest active if it was used one or more times within the last 5 years.

Golden Eagle

The Project site is within the known geographic range of golden eagle (GOEA) and there are several documented occurrences of GOEA in the Project vicinity (CDFW 2025). GOEA are known to inhabit open areas with large trees, utility towers, and cliffs

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for nesting (Pagel et al. 2010). These habitat features may be present near the Project site, and as such, CDFW recommends that a qualified biologist conduct a habitat assessment to determine whether suitable GOEA nesting habitat is present within the Project site or vicinity. If suitable nesting habitat is identified, CDFW recommends incorporating survey methods outlined in the Protocol for the Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations guidelines (Pagel et al. 2010). If a GOEA nest is detected, consultation with CDFW is recommended for guidance on how to implement the Project and avoid take of the species or for guidance on obtaining an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) if certain conditions are met (see Fish & G. Code §2081.15).

Western Burrowing Owl

The California Fish and Game Commission approved western burrowing owl (BUOW) as a candidate for potential listing as a protected species under CESA on October 10, 2024, and published these findings in the California Regulatory Notice Register on October 25, 2024. As such, BUOW is now a candidate under CESA and receives the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085).

The Project site is within the known geographic range of BUOW, and there are numerous recent and historical occurrences located within and adjacent to the Project site (CDFW 2025). BUOW typically inhabit open grasslands and desert scrublands containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. BUOW may also use “man-made burrows” such as pipes or culverts. Based on aerial imagery the Project site and adjacent areas likely contain suitable habitat for BUOW nesting and foraging.

As there is a strong likelihood that BUOW could be impacted by Project activities, CDFW recommends assessing presence/absence of BUOW on the Project site, as well as a 500-meter buffer surrounding the Project site, by having a qualified biologist conduct surveys following the 2012 Staff Report on Burrowing Owl Mitigation (2012 Staff Report; CDFG 2012) as part of the biological studies conducted in support of the DEIR.

In addition to conducting BUOW surveys, CDFW recommends the DEIR include the following measures:

Recommended Mitigation Measure 5: BUOW Surveys Prior to Construction

Depending on the time between the initial survey efforts conducted in support of the DEIR and Project construction, CDFW recommends that additional surveys following the 2012 Staff Report be repeated the survey season immediately prior to construction.

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Recommended Mitigation Measure 6: BUOW Avoidance Buffer

Should a BUOW individual or known BUOW den (active or inactive) be detected, either during pre-construction surveys or construction activities, CDFW recommends that no-disturbance buffers, as outlined in the 2012 Staff Report on Burrowing Owl Mitigation, be implemented prior to and during any ground-disturbing activities. CDFW also recommends that these buffers be implemented for both wintering and breeding BUOW.

Recommended Mitigation Measure 7: BUOW Take Authorization

If a BUOW individual or known BUOW den (active or inactive) is detected, and the no-disturbance buffers outlined in the 2012 Staff Report are not feasible, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), is necessary to comply with CESA.

Crotch's Bumble Bee

The Project site is within the known geographic range of the State candidate Crotch's bumble bee (CBB) and there are multiple historical occurrences near the Project Site (CDFW 2025). CBB inhabit a variety of habitats, including grasslands, scrublands, openings in woodlands, and areas with bare ground such as vacant lots, dirt roads, and levees (Xerces Society et al. 2018). CBB use requisite habitat elements for nesting, such as small mammal burrows and bunch/thatched grasses, which may be present in or near the Project site.

As CBB may be present within the Project site, CDFW recommends a qualified biologist conduct a habitat assessment to determine if the Project site and the immediate surrounding vicinity contain habitat suitable to support CBB. Potential nesting sites, which include all small mammal burrows, perennial bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, and hollow logs should be documented as part of the assessment. If suitable habitat is identified, CDFW recommends a qualified biologist conduct focused surveys for CBB and their requisite habitat features following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023b) as part of the biological studies conducted in support of the DEIR.

In addition to conducting a CBB habitat assessment and surveys, CDFW recommends the DEIR include the following measures:

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Recommended Mitigation Measure 8: CBB Surveys Prior to Construction

Depending on the time between the initial survey efforts, if potentially suitable habitat is identified and regardless of what time of year Project activities will be conducted, CDFW recommends that a qualified biologist conduct focused surveys for CBB and their requisite habitat features following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023b).

Recommended Mitigation Measure 9: CBB Avoidance

If CBB is detected, CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If CBB are detected during surveys and ground-disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement Project activities and avoid take. Any detection of CBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take.

Recommended Mitigation Measure 10: CBB Take Authorization

If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

American Badger

The Project site is within the known geographic range of American badger (AMBA) and there are several documented occurrences near the Project site (CDFW 2025). AMBA occupies sparsely vegetated land cover with dry, friable soils to excavate dens, which they use for cover, and that support fossorial rodent prey populations (i.e., ground squirrels, pocket gophers, etc.) (Zeiner et al. 1990). Based on aerial imagery, the Project site potentially contains habitat suitable for AMBA.

CDFW recommends that a qualified biologist assess the presence/absence of AMBA by conducting a focused field survey in all areas of potentially suitable habitat as part of the biological studies conducted in support of the DEIR. If surveys indicate the presence or potential presence of AMBA, consultation with the CDFW is recommended for guidance on mitigation measures such as avoidance, minimization, and mitigation.

Desert Kit Fox

The Project Site is within the known geographic range of desert kit fox (DKF) and this species is known to inhabit sparsely vegetated scrub habitats within the California desert that support small mammal populations (McGrew 1979). Based on aerial

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imagery, the Project Site appears to have suitable habitat for DKF denning and foraging. CDFW recommends that a qualified biologist assess the presence/absence of DKF by conducting a focused field survey in all areas of potentially suitable habitat as part of the biological studies conducted in support of the DEIR. If surveys indicate the presence or potential presence of DKF, consultation with the CDFW is recommended for guidance on take avoidance measures.

Townsend's Big-eared Bat

The Project site is within the known geographic range of Townsend's big-eared bat and there are a number of historical occurrences in the vicinity of the Project site (CDFW 2025). CDFW recommends that a qualified biologist assess the presence/absence of Townsend's big-eared bat by conducting a habitat assessment as part of the biological studies conducted in support of the DEIR. If potentially suitable habitat is identified, consultation with CDFW is recommended for guidance on developing Project-specific and species-specific survey methodology to be conducted as part of the biological technical studies.

Special-Status Plants

CDFW recommends that the Project site be surveyed for special-status plants by a qualified botanist following the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018b). This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. Please note that adverse conditions from yearly weather patterns may prevent botanical field surveyors from determining the presence of, or accurately identifying, some special status plants in the surveyed area. Disease, drought, predation, fire, herbivory, or other disturbance may also preclude presence or identification of special status plants in any given year. Visiting the survey site in more than one year increases the likelihood of detection. If special-status plants are identified during surveys, consultation with CDFW is recommended for guidance on mitigation measures such as avoidance, minimization, and mitigation. If State endangered, threatened, or rare plants are identified during special status plant surveys and take cannot be avoided, then to ensure compliance with CESA and the Native Plant Protection Act (NPPA), consultation with CDFW for acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) and/or California Code of Regulations, Title 14, section 786.9, subdivision (b), is necessary to comply with CESA and the NPPA. Additional focused survey recommendations for western Joshua tree (WJT) are provided below.

Western Joshua Tree

According to aerial imagery and the Project NOP, WJT is confirmed to be present within the Project Site. CDFW recommends that a qualified botanist conduct focused WJT

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surveys to identify the locations, number, and health of individuals as part of the biological technical studies conducted in support of the DEIR. WJT is a candidate threatened species under CESA. Under CESA, species classified as a candidate species are afforded the same protection as CESA-listed species. Take of any CESA listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). The California state legislature has enacted the Western Joshua Tree Conservation Act (WJTCA) which aims to provide protection of WJT and provides another permitting mechanism for the incidental take of WJT. For unavoidable impacts, CDFW recommends consultation with CDFW and obtaining appropriate take authorization under CESA.

Recommended Mitigation Measure 11: WJT Take Authorization

If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), is necessary to comply with CESA. Additionally, the Project also has the option to obtain take authorization through issuance of a WJTCA ITP, pursuant to Fish and Game Code section 1927.3.

Editorial Comments and/or Suggestions

Battery Energy Storage System Evaluation: The proposed Project includes installation of a 4 GWh (approximately 1000 MW) battery energy storage system (BESS) on the Project site. CDFW is aware of recent catastrophic fires resulting from lithium-ion BESS operations at BESS facilities within California. As such, these BESS systems warrant a careful evaluation for potential fire-related impacts to biological resources within and surrounding the Project site, particularly within nearby natural habitats. Lithium-ion BESS fires can release an array of toxic chemicals into the air (Mylenbusch et al. 2023). In addition to potential human health concerns, these emissions may also impact air quality for nearby wildlife, and harmful particulate matter may settle into soils or waterways, possibly affecting soil-dwelling organisms, burrowing mammals, and aquatic life. Concentrations of toxic gases and particulates may be highest in the immediate vicinity of the fire, and the risk of explosion exists, making the area hazardous for firefighters. Further, the use of water for fire suppression is not always appropriate and may exacerbate the fire.

As such, CDFW recommends the DEIR include a thorough analysis of the BESS component of the Project and evaluate the potential impacts of a catastrophic BESS fire on biological resources. CDFW recommends the evaluation detail the Project-specific measures that would be implemented to reduce the risk of catastrophic fire, and to carefully consider BESS siting, spacing, battery life and degradation, and the most appropriate fire protection/suppression system. CDFW also recommends that the BESS be sited away from the natural habitats adjacent to the Project site and that the Project

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evaluate multiple alternatives that avoid and minimize potential impacts to biological resources.

Wildlife Friendly Fencing: CDFW recommends that all fencing installed on the perimeter of the solar Project be designed to allow for passage of small and medium-sized wildlife, while impeding the passage of larger predators such as coyotes. Perimeter fencing should be installed with a four (4) to six (6) inch gap from the bottom of the fencing material and knuckled back to form a smooth edge and allow permeability for wildlife.

Cumulative Impacts: CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the Project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining health and will be impacted by the Project, even if those impacts are relatively small (i.e., less than significant). Cumulative impacts are recommended to be analyzed using an acceptable methodology to evaluate the impacts of this Project's incremental contribution to habitat loss and past, present, and reasonably foreseeable future projects on resources and be focused specifically on the resource, not the Project. The cumulative impacts analysis should specifically include all past, present, and foreseeable renewable energy projects in the Antelope Valley area. An appropriate resource study area should also be identified and mapped for each resource being analyzed and utilized for this analysis. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

Lake and Streambed Alteration: Based on a review of aerial photography, the Project site contains numerous streams and associated hydrologic features, and certain stream features, such as alluvial fans and desert washes, may be difficult to delineate using field verification only. Project activities that will substantially change or use any material from the bed, bank, and channel of any river, stream, or lake are subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit or dispose of debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial and may include those that are highly modified such as canals and retention basins.

CDFW is required to comply with CEQA prior to issuance of a Final Lake or Streambed Alteration Agreement (LSAA); therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a

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subsequent CEQA analysis may be necessary for Final LSAA issuance. For information on notification requirements, please refer to CDFW's website (https://wildlife.ca.gov/Conservation/LSA) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593.

Nesting Birds: To protect nesting birds, CDFW recommends that Project ground-disturbing or vegetation-disturbing activities occur during the bird non-nesting season; however, if ground- or vegetation-disturbing activities must occur during the nesting season (February 1 through September 15), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Code sections as referenced above.

The Project site and vicinity are known to support many species of nesting birds, including Le Conte's thrasher, loggerhead shrike, long-eared owl, short-eared owl, prairie falcon, and California horned lark. If the nesting season cannot be avoided, CDFW recommends that a qualified biologist conduct a pre-construction survey for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected, either directly or indirectly, by the Project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. CDFW recommends that a qualified biologist establish a behavioral baseline of all identified nests. Once Project activities begin, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is a compelling biological or ecological reason to do so, such as when the Project site would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

CNDDB: Please note that the CNDDB is populated by records through voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDB but where there is suitable habitat features capable of

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supporting species. A lack of an occurrence record in the CNDDB does not mean a species is not present. To adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified biologist during the appropriate survey period(s) using the appropriate protocol survey methodology are warranted to determine whether any special-status species are present at or near the Project site.

Artificial Lighting: Installation of outdoor artificial night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication, determining when to begin foraging, thermoregulation behavior, and migration (Longcore and Rich 2004, Miller 2006, Nightingale et al. 2006, Perry et al. 2008, Stone et al. 2009). Phototaxis, a phenomenon which results in attraction and movement towards light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004). Project activities could result in disruption of wildlife behavior, inadvertent injury, or mortality.

CDFW recommends that the DEIR for the Project include an analysis of artificial lighting as it relates to biological resources and incorporate enforceable mitigation measures to decrease the impacts of artificial outdoor lighting on wildlife species. Potentially feasible mitigation measures include motion sensitive lighting; mounting light fixtures as low as possible to minimize light trespass; use of light fittings that direct and confine the spread of light downward; and use of long-wavelength light sources. In addition, CDFW recommends that lighting is not installed in or directed towards ecologically sensitive areas (e.g., streams, wetlands, and habitat used by special-status species, such as nesting/roosting sites and riparian corridors) and the use of the white/blue wavelengths of the light spectrum be avoided.

Project Alternatives Analysis: CDFW recommends that the information and results obtained from the biological technical surveys, studies, and analyses conducted in support of the Project's DEIR be used to develop and modify the Project's alternatives to avoid and minimize impacts to biological resources to the maximum extent possible. When efforts to avoid and minimize have been exhausted, remaining impacts to sensitive biological resources may need to be mitigated to reduce impacts to a less than significant level, if feasible.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNDDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to the CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to the CNDDB can

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be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the County in identifying and mitigating Project impacts on biological resources. Please see the enclosed Mitigation Monitoring and Reporting Program (MMRP) table (Attachment 1) which corresponds with the recommended mitigation measures in this comment letter. If you have any questions, please contact Ren Cotter, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 767-0956, or by electronic mail at Ren.Cotter@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Julie Vance
FA83F09FE08945A...

Julie A. Vance
Regional Manager

Attachment (MMRP)

ec: State Clearinghouse
Land Use and Climate Innovation
state.clearinghouse@lci.ca.gov

Ren Cotter
California Department of Fish and Wildlife

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Attachment 1
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT: Galaxy Solar PV and Storage Project by Galaxy Solar PV and Storage, LLC

SCH No.: 2025081409

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
SWHA	
Recommended Mitigation Measure 1: SWHA Surveys Prior to Construction	
Recommended Mitigation Measure 3: SWHA Take Authorization	
Recommended Mitigation Measure 4: SWHA foraging habitat mitigation	
BUOW	
Recommended Mitigation Measure 5: BUOW Surveys Prior to Construction	
Recommended Mitigation Measure 7: BUOW Take Authorization	
CBB	
Recommended Mitigation Measure 8: CBB Surveys Prior to Construction	
Recommended Mitigation Measure 10: CBB Take Authorization	
WJT	
Recommended Mitigation Measure 11: WJT Take Authorization	
During Construction	
SWHA	
Recommended Mitigation Measure 2: SWHA Avoidance Buffer	
BUOW	
Recommended Mitigation Measure 6: BUOW Avoidance Buffer	
CBB	
Recommended Mitigation Measure 9: CBB Avoidance	

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Attachment 2

Docusign Envelope ID: BD6E6262-FBDE-8936-810C-40477F7A63EE

Attachment 2
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT: Galaxy Solar PV and Storage Project by Galaxy Solar PV and Storage, LLC

SCH No.: 2025081409

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
MGS	
Recommended Mitigation Measure 1: MGS Protocol Surveys	
SWHA	
Recommended Mitigation Measure 2: SWHA Foraging Habitat Mitigation	
LETH	
Recommended Mitigation Measure 3: LETH Preconstruction Surveys	
Recommended Mitigation Measure 4: LETH Avoidance and Consultation	
CBB	
Recommended Mitigation Measure 5: CBB Avoidance and Consultation	
Recommended Mitigation Measure 6: CBB Take Authorization	
AMBA/DKF	
Recommended Mitigation Measure 7: AMBA/DKF Den Collapse Consultation	
AML	
Recommended Mitigation Measure 8: AML Habitat Mitigation Plan	
During Construction	
LETH	
Recommended Mitigation Measure 4: LETH Avoidance and Consultation	
CBB	
Recommended Mitigation Measure 5: CBB Avoidance and Consultation	
AMBA/DKF	
Recommended Mitigation Measure 7: AMBA/DKF Den Collapse Consultation	

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AML	
Recommended Mitigation Measure 9: AML Avoidance	

Response to Comment Letter 3: California Department of Fish and Wildlife

3-A

The commenter acknowledges receipt of the Draft EIR and thanks Kern County for the opportunity to provide comments. This comment does not otherwise raise a substantive issue on the content of the Draft EIR. The comments provided have been noted for the record, and no revisions to the Draft EIR are required.

3-B

CDFW summarizes its trustee/responsible agency role and authorities for protection of nesting birds and other species. The County acknowledges CDFW's regulatory role and legal authorities. The comment has been noted for the record, and revisions to the Draft EIR are not necessary.

3-C

The comment summarizes the project description, including the proponent, objectives, major components, location, elevation, and vegetation communities. The commenter notes that CDFW previously submitted comments in response to the Notice of Preparation in October 2025 and attached the letter. The commenter notes that multiple biological technical studies were conducted in support of the Draft EIR. The comment has been noted for the record, and no revisions to the Draft EIR are necessary.

3-D

The commenter states that the Draft EIR concludes that impacts to WJT are considered significant and unavoidable and strongly recommends that the project proponent consult with CDFW early in the planning process to obtain take authorization for WJT. The commenter concurs with **MM 4.4-8**, which requires consultation with CDFW and compliance with an ITP. The commenter provides an alternate option for the project to obtain take authorization through issuance of a Western Joshua Tree Conservation Act ITP pursuant to Fish and Game Code section 1927.3 (rather than Fish and Game Code section 2081 [b], as proposed in the Draft EIR). The comment reiterates the importance of close coordination with CDFW on permit and mitigation requirements.

Because impacts to WJT are expected as a result of project development, the Draft EIR determines that impacts to the species are potentially significant and, in addition to the extensive set of measures detailed above to avoid and minimize impacts to WJT, the Draft EIR imposes **MM 4.4-8**, which requires the project to avoid WJT except to the extent authorized by an ITP, and to comply with all avoidance, minimization, and compensatory mitigation measures set forth in any ITP issued to the project by CDFW. It further requires the project to restore and enhance WJT habitat through relocation of a minimum of 900 onsite WJT stems to onsite or offsite lands, with a Post WJT Relocation Report required to document successful relocation. Minor revisions to **Mitigation Measure MM 4.4-8** are provided below and in the errata:

MM 4.4-8: The project shall avoid western Joshua tree (WJT) individuals, <u>if feasible</u> except to the extent take is permitted by the California Department of Fish and Wildlife (CDFW). <u>If avoidance of WJT is not feasible, as determined by the Lead Biologist, and p</u>~~P~~<u>r</u>ior to the issuance of grading permits, the project applicant shall consult with CDFW ~~regarding~~ <u>and obtain an incidental take permit (ITP) for</u> the take of WJT and shall comply with all avoidance, minimization, and compensatory mitigation measures, as set forth in any ITP issued to the project by CDFW. Documentation of any such CDFW take authorization and

mitigation shall be provided to the Kern County Planning and Natural Resources Department.

The project proponent shall also submit to the Kern County Planning and Natural Resources Department confirming documentation that the following has been implemented where take of WJT individuals cannot be avoided:

d. Prior to the issuance of a grading permit, the project proponent/operator shall develop a Joshua Tree Preservation Plan or other similar plan as required by any incidental take permit issued to the project by CDFW. The Plan shall be prepared by the Lead Biologist(s) or their designee pre-approved by Kern County and shall be approved by the appropriate agencies, including Kern County, prior to implementation. At a minimum, the plan shall identify the methods utilized, as applicable, ~~that the project is taking~~ to comply with any California Endangered Species Act (CESA) or CDFW take requirements including relocation methods, monitoring and reporting, and compensatory mitigation related to the protection or mitigation of impacted Joshua trees. The Plan shall also clearly delineate how the project includes restoration and enhancements of WJT habitats through relocation of a minimum of 900 onsite WJT stems to approved onsite or offsite conserved lands.

e. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department to be kept on file. ~~The Plan shall also clearly delineate how the project includes restoration and enhancements of WJT habitats through relocation of a minimum of 900 onsite WJT stems to onsite or offsite lands.~~

f. Prior to final occupancy approval, a Post WJT Relocation Report shall be submitted to the Kern County Planning and Natural Resources Department documenting completion of WJT relocation.

3-E

The comment expresses CDFW's concern regarding several special-status species, including desert tortoise (Gopherus agassizii; DETO), western burrowing owl (Athene cunicularia hypugaea, BUOW), Mohave ground squirrel (Xerospermophilus mohavensis), Swainson's hawk (Buteo swainsoni; SWHA), Le Conte's thrasher (Toxostoma lecontei; LETH), Crotch's bumble bee (Bombus crotchii. CBB), American badger (Taxidea taxus, AMBA), desert kit fox (Vulpes macrotis arsipus, DKF); and the California Rare Plant Rank (CRPR) 1B.2 alkali mariposa lily (Calochortus striatus, AML). Responses regarding individual species are provided below in Responses to Comments 3-F through 3-L.

3-F

The comment recommends that protocol level surveys for Mohave ground squirrel be conducted within potentially suitable habitat on the project site and consultation with CDFW if Mohave ground squirrel is detected.

The Draft EIR provides a reasonable, site-specific basis for its analysis of Mohave ground squirrel. In March and May 2024, a habitat suitability assessment was completed within the Study Area. The habitat suitability assessment was performed by reviewing vegetation mapping and soils data and performing a site visit by driving existing roads and walking within the Study Area to assess the habitat for its suitability to support Mohave ground squirrel. Overall, approximately 43 percent of the Study Area was documented as moderate quality habitat, 55 percent of the Study Area was documented as low/moderate quality habitat, and 2 percent of the Study Area was documented as unsuitable. No highly suitable habitat is present in the Study Area. That assessment, together with the observed habitat conditions and recent occurrence information, supports the Draft EIR's conclusion that the Study Area is largely dominated by allscale scrub

and does not provide suitable reproductive habitat for a substantial resident population of Mohave ground squirrel. No Mohave ground squirrel individuals were observed during field surveys. The Draft EIR therefore does not assume the species is absent; rather, it evaluates the species deductively based on the available site data and the known ecological conditions of the project site.

While it is unlikely that the Study Area would support a substantial resident reproductive population, the Study Area may support juvenile dispersal and temporary occupation. Therefore, the Draft EIR concludes that potential impacts to Mohave ground squirrel would be less than significant with implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-3** and **MM 4.4-9**, which include lead biologist oversight, Worker Environmental Awareness Training, general avoidance and protective measures, and preconstruction surveys for special-status wildlife prior to disturbance.

3-G

The comment summarizes the project's protocol SWHA survey results, reiterates CDFW's recommendation for protocol surveys, a 0.5-mile nesting avoidance buffer, consultation if avoidance cannot be implemented, and compensatory mitigation with a recommendation for a minimum 2:1 mitigation ratio for impacts to foraging habitat within 5 miles of active nests.

SWHA were not observed within the Study Area during the numerous field surveys conducted from 2023 through 2025 and this species was not observed nesting within 5 miles of the project site during protocol level nest surveys conducted in 2023, 2024, and 2025. While this species was not observed on the project site, remanent stands of WJTs provide suitable nesting habitat, and desert lands within the 5-mile buffer largely consist of potential Swainson's hawk foraging habitat, with the exception of developed areas, as described in **Appendix D6** to the Draft EIR. Direct impacts to SWHA could include reduction or loss of foraging habitat as a result of vegetation removal prior to grading and construction activities. However, while availability of potential foraging habitat would be reduced or lost during construction, there is an abundance of suitable foraging habitat surrounding the project site.

Under CEQA, mitigation is required whenever a project may result in a significant impact to the environment. Where feasible, the impacts should be mitigated such that remaining impacts are less than significant. Per the CDFW Five-Year Status Review for Swainson's Hawk (*Buteo swainsoni*), prepared in 2016, four different studies documented average home ranges of 1,001 to 9,979 acres for nesting Swainson's hawks in the Central Valley (CDFW 2016). These home ranges are equivalent to circles with radii of 0.71 to 2.23 miles, as described in the Swainson's Hawk Home Range and Habitat Literature Review for the Buttonbush Solar and Storage Project in Appendix O.7 of the Final EIR. In addition, a recent study of four utility-scale solar energy facilities in the Central Valley found that Swainson's hawks foraged within the solar arrays and that solar arrays were favored over some types of agricultural use (Estep 2021). Specifically, Estep's analysis found that compared to their availability in the landscape, solar arrays, alfalfa, tilled, and wheat fields were all used more often than expected, and ruderal/developed, orchard, grassland, and idle/fallow habitats were used less often than expected. Thus, conversion of agricultural lands to solar energy facilities does not result in the complete loss of foraging habitat, and it is expected that Swainson's hawk will continue to use the project area for foraging during project operations.

Based on the information from these studies of home range size and use of solar energy facilities, the proposed project may result in a minor reduction in Swainson's hawk foraging opportunities; however, there are no high-value foraging habitats on the project site.

Although there is an abundance of suitable foraging habitat in the area surrounding the project site, the EIR considers impacts to Swainson's hawk foraging habitat as potentially significant. Accordingly, if at the

commencement of project construction, Swainson's hawk remain listed as a state threatened species, and if active Swainson's hawk nests are found within a 5-mile radius of the project site during preconstruction surveys, the project proponent/operator would be required to mitigate the loss of any moderate quality Swainson's hawk foraging habitat for any portion of the project site within 5-miles of an active nest at a 0.5:1 ratio in accordance with **Mitigation Measure MM 4.4-13**, which would reduce impacts on foraging habitat to less than significant. A reduced ratio is appropriate given the low to moderate quality habitat on the project site and newer information demonstrating that Swainson's hawk may continue to use the project site for foraging. This ratio also is consistent with other recently approved solar project mitigation measures in Kern County and the Antelope Valley. No revisions to the Draft EIR or additional mitigation measures are required.

3-H

The comment notes that LETH has been approved as a candidate for listing under CESA and therefore received the same legal protection as an endangered or threatened species. The DEIR concludes that there is a moderate potential for LETH to forage and nest within the project site. The County acknowledges these points. The commenter recommends the following species-specific mitigation be implemented:

Recommended Mitigation Measure 3: LETH Preconstruction Surveys

CDFW recommends that a qualified biologist conduct surveys assessing presence/absence of LETH (individuals and nests) on the project site, as well as a 500-foot buffer surrounding the project site during the survey season immediately prior to construction. CDFW recommends these surveys be conducted in coordination with CDFW to assist with determining an appropriate survey methodology.

Recommended Mitigation Measure 4: LeConte's Thrasher Avoidance and Consultation

Should a LeConte's Thrasher nest or occupied habitat (i.e., territory) be detected, either during pre-construction surveys or construction activities, CDFW recommends that a 500-foot no-disturbance buffer be implemented around these areas and consultation with CDFW occur to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), is necessary to comply with CESA.

Mitigation Measures MM 4.4-9 and MM 4.4-10 are designed to address impacts to nesting birds and their habitats, including LeConte's thrasher. **MM 4.4-9** stipulates that a Lead Biologist or designee will conduct pre-construction surveys for special-status wildlife species within the project site and a 500-foot buffer (where legally accessible). **MM 4.4-10** requires pre-construction and pre-decommissioning nesting surveys within 10 days of ground disturbing activities during the nesting bird season. The measure includes typical buffer distances around nest sites, which are to remain in place until it is determined that the nest is no longer active. **Mitigation Measure MM 4.4-10** has been revised to require continuous monitoring for listed passerine and raptor species:

MM 4.4-10: If construction and decommissioning activities are conducted during the typical nesting bird season (February 1 through August 31), the Lead Biologist(s) or their designee shall conduct a pre-construction or pre-decommissioning nesting survey within 10 days of ground disturbance activities to reduce potential impacts to avian species. Surveys need not be conducted for the entire project site at one time; they may be phased so that surveys occur within 10 days prior to disturbance in specific areas of the site. The survey area shall cover a 500-foot buffer (where legally accessible).

c. If nesting birds/raptors are observed, ~~and continuous monitoring by the qualified biologists(s) will occur,~~ the Lead Biologist(s) or approved Biological Monitor(s) shall establish an appropriate buffer distance around the nest site (typically 100 feet for passerines and up to 500 feet for LeConte's thrasher and raptors) and if feasible, continuous monitoring by a qualified biologist shall occur. If continuous monitoring is not feasible, then a minimum no-disturbance buffer of ~~250~~ 100 feet will be established for non-listed passerines under the protection of MBTA. Continuous monitoring is required for listed passerines and raptors. The buffer shall remain in place until the Lead Biologist(s) or approved Biological Monitor(s) has determined that the nest is no longer active. Encroachment into the buffer may occur at the discretion of the Lead Biologist(s) in consultation with the Kern County Planning and Natural Resources Department. Nesting bird protections will only apply to MBTA, CESA, and/or ESA species and will not be applied to non-native bird species (i.e. European starlings, English sparrows, rock doves, etc.).

d. If construction is scheduled to occur during the non-nesting season (September 1 to January 31), no pre-construction surveys or additional measures are required for nesting birds, including raptors.

3-I

The commenter acknowledges that western burrowing owl was documented within the project site and suitable nesting and foraging habitat is located within the project site and vicinity. The commenter concurs with the portions of **MM 4.4-11** pertaining to preconstruction surveys and avoidance buffers for western burrowing owl but does not concur with the approach for den designation and excavation. If a western burrowing owl individual or known western burrowing owl den (active or inactive) is detected and the 2012 Staff Report no-disturbance buffers are not feasible, consultation with CDFW is warranted to discuss how the project can be implemented without take. If take cannot be avoided, take authorization through an ITP is required pursuant to Fish and Game Code section 2081 subdivision (b).

If take is unavoidable as determined by the lead biologist, the project would be required to obtain an ITP for western burrowing owl and will comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species. Revisions have been made to **Mitigation Measure MM 4.4-11:**

Mitigation Measure 4.4-11: No more than 14 days prior to commencement of ground-disturbing activities, the Lead Biologist(s) or their designee shall conduct a pre-construction survey in areas with suitable western burrowing owl habitat proposed for disturbance within the project site and 500-meter buffer (where legally accessible) to determine if occupied known and/or occupied nesting western burrowing owl burrows are present. Burrowing owl burrows shall be evaluated and classified per the definitions below:

a. Potential Burrow: Any subterranean hole four inches or larger for which no current evidence is present to conclude that the burrow is being used by a burrowing owl.

b. Occupied Known Burrow: A burrow that shows sign of burrowing owl presence (whitewash, feathers, pellets, prey remains, eggshell fragments) and presence of at least one burrowing owl. If monitoring confirms that burrowing owl are no longer using a burrow, it will be redesignated as potential.

c. Occupied Nesting Burrow: A burrow where monitoring overseen by the Lead Biologist(s) or approved Biological Monitor demonstrates the presence of burrowing owl eggs, chicks, dependent young, and/or brooding or egg incubation (via inter burrow scope).

Survey methodology shall be consistent with the methods outlined in the 2012 California Department of Fish and Game Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 7 to 20 meters apart, adjusting for vegetation height and density as needed, and noting burrows with fresh burrowing owl sign or presence of burrowing owl. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur prior to disturbance in specific areas of the site. The western burrowing owl surveys may be conducted in conjunction with other required preconstruction surveys, if timing is appropriate. Copies of the survey results shall be submitted to the Kern County Planning and Natural Resources Department.

a. If potential burrowing owl burrows are detected any time of year, burrows may be excavated under the direct supervision of the Lead Biologist without prior camera monitoring.

b. If occupied known and/or occupied nesting burrowing owl burrows are detected, a no-disturbance buffer shall be established around the burrow and no ground-disturbing activities may occur within the buffer zone.

c. An established burrowing owl burrow no-disturbance buffer may be removed once the burrowing owl(s) is/are no longer using the burrow (redesignated as a potential burrow).

The size of employed no-disturbance buffers may be up to 500 meters from an occupied known and/or occupied nesting burrowing owl burrow year-round. Buffer size is dependent upon time of year and level of construction activity disturbance. ~~Depending on the level of disturbance, a smaller buffer may be established by the Lead Biologist based on the visibility and sensitivity responses of each individual burrowing owl.~~ Ultimate buffer distances shall be determined in consultation with CDFW based on the visibility and sensitivity responses of each burrowing owl and as defined in the incidental take permit. Buffers shall be maintained for the duration the burrowing owl burrow remains occupied as determined by the Lead Biologist.

In October 2024, western burrowing owl was designated a candidate species under the CESA. If, at the commencement of project construction, western burrowing owl is present and is either still a candidate species, or has been listed as threatened, or endangered under CESA, and avoidance of occupied known and/or occupied nesting western burrowing owl burrows is infeasible as determined by the Lead Biologist, the Applicant shall ~~consult with the California Department of Fish and Wildlife (CDFW) regarding the potential for project construction activities to result in take of burrowing owl~~ obtain an incidental take permit (ITP) for western burrowing owl and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ~~Incidental Take Permit (~~ITP~~)~~ issued for the project by CDFW authorizing take of the species.

3-J

The comment states the findings for Crotch's bumble bee outlined in the Draft EIR, which determined that Crotch's bumble bee have a high potential to forage within the project site and a moderate potential to nest on the project site. CDFW concurs with the portion of **Mitigation Measure MM 4.4-18** that requires pre-

construction surveys for Crotch's bumble bee. However, due to the difficulties of locating all Crotch's bumble bee nests in a given area, the commenter recommends immediate consultation with CDFW if nesting or foraging CBB is detected. Additionally, CDFW recommends the following measures:

Recommended Mitigation Measure 5: CBB Avoidance and Consultation
If CBB is detected, CDFW recommends that all small mammal burrows and thatched/bunch grasses be initially avoided by a minimum of 50 feet to avoid take and potentially significant impacts until CDFW can be consulted regarding an appropriate avoidance area. Any detection of CBB prior to or during construction warrants consultation with CDFW to discuss how to avoid take, regardless of time of year.

Recommended Mitigation Measure 6: CBB Take Authorization
If take of CBB cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), is necessary to comply with CESA.

As stated in the Draft EIR, due to the commonality of habitat types and features (e.g., small mammal burrows) that the species can utilize for nesting and their diversity of foraging and nectar plants, Crotch's bumble bee habitat is considered widespread and in abundance in the project region and occurs in the Study Area. Though Crotch's bumble bee has not been confirmed present on the site to date, vegetation or ground-disturbing activities during project construction have the potential to result in direct and indirect impacts on this species if present in or near active construction areas. If Crotch's bumble bee is present, impacts on the species would be considered potentially significant. However, the project would be constructed using techniques that allow for retention and re-establishment of vegetation following project construction. Site preparation techniques would minimize impacts on natural vegetation where possible, using mow-and-roll vegetation clearance strategy, and minimizing conventional grading throughout the site to the maximum extent possible. Potential impacts on the species' habitat would be less than significant because of the abundance of suitable habitat surrounding the project site and because vegetation supporting the species would continue to be available on the site during project operations.

In addition to the extensive set of measures detailed above to avoid and minimize impacts to Crotch's bumble bee, the Draft EIR imposes **MM 4.4-18**, which adopts immediate, objective standards, requiring nesting surveys in accordance with the CDFW 2023 Survey Considerations for CESA Candidate Bumble Bee (CDFW, 2023). Further, the measure establishes a 50-foot no-disturbance buffer around any active nest. Finally, if take of Crotch's bumble bee is determined to be unavoidable by the lead biologist, the measure requires the project to obtain an ITP and comply with all avoidance, minimization, and compensatory mitigation measures set forth in the ITP. Minor revisions to **Mitigation Measure MM 4.4-18** are provided below:

> **MM 4.4-18:** Preconstruction surveys for Crotch's bumble bee shall be conducted prior to initial ground disturbing activities. The survey area shall consist of suitable habitat areas within the project site and 50-foot buffer (access permitting). Surveys and timing would be consistent with the survey methodologies set out in the CDFW Survey Considerations for CESA Candidate Bumble Bee (CDFW, 2023) or as determined adequate for the project per coordination with the California Department of Fish and Wildlife (CDFW). The purpose of this survey will be to identify active Crotch's bumble bee nest colonies.
>
> a. If active Crotch's bumble bee nests are discovered onsite, the Lead Biologist(s) or approved Biological Monitor shall establish a 50-foot no disturbance buffer around the nest to reduce the risk of disturbance or accidental take.

b. If establishment of a no disturbance buffer is feasible, construction activities shall not occur within the no disturbance buffer until the Lead Biologist(s) determines that the colony is no longer active (i.e., no Crotch's bumble bees are seen flying in or out of the nest for three consecutive days indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined inactive, construction activities within the no disturbance buffer(s) shall be allowed to resume.

c. In June 2019, Crotch's bumble bee was designated a candidate species under the CESA. If, at the commencement of project construction, Crotch's bumble bee is present and is either still a candidate species, or has been listed as threatened, or endangered under CESA, and ~~If~~ avoidance of an active nest is not feasible, as determined by the Lead Biologist, the project proponent/operator shall ~~consult with CDFW regarding potential for project activities to result in~~ obtain an incidental take permit of the Crotch's bumble bee and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department.

Potential impacts on Crotch's bumble bee habitat would be further minimized through implementation of **Mitigation Measure MM 4.4-15**, which requires revegetation of temporarily disturbed areas and calls for retention of natural vegetation on the project site where possible. In addition, the project proponent/operator will implement **Mitigation Measures MM 4.4-1** through **MM 4.4-3** which require a Lead Biologist to oversee all biological mitigation measures, implementation of a Worker Environmental Awareness Training Program, and general avoidance and protective measures designed to avoid impacts to special status species during construction, operations and maintenance, and decommissioning activities. Lastly, the project proponent/operator will implement **Mitigation Measures MM 4.1-3**, **MM 4.3-3**, and **MM 4.9-2**, which require a Landscape Revegetation and Restoration Plan, Fugitive Dust Control Plan, and use of approved herbicides.

3-K

The commenter states that American badger sign and desert kit fox individuals and dens were observed within the project site during surveys. **Mitigation Measure MM 4.4-12** requires the lead biologist to evaluate the status of dens found during preconstruction surveys and prohibits construction activities within 50 feet of any active American badger dens and 100 feet of any active desert kit fox dens. CDFW concurs with these construction buffers but does not agree with the potential for dens to be collapsed during the pupping season. As such, CDFW recommends the following measure:

Recommended Mitigation Measure 7: American Badger/Desert Kit Fox Dens Collapse Consultation

CDFW recommends prohibiting collapse of any known American badger or desert kit fox den, whether it is determined to be active or inactive, during the respective pupping seasons for each species. CDFW also recommends that collapse of any known American badger or desert kit fox dens occur in consultation with CDFW.

During surveys conducted in spring 2023 and fall 2024 of a study area encompassing 3,889 acres, one live desert kit fox was observed at a known den. No American badgers were observed during surveys. If desert kit fox or badgers were to occur onsite, they would most likely occur in low numbers.

Desert kit foxes and American badger are not state or federally listed; however, American badgers are a CDFW species of special concern. Desert kit foxes are not a CDFW species of special concern, they are, however, protected by Title 14 of the California Code of Regulations Section 460, which states that “fisher, marten, river otter, desert kit fox and red fox may not be taken at any time," and within the Fish and Game Code Section 4000, which states, "Fur-bearing mammals enumerated. The following are fur-bearing mammals: pine marten, fisher, mink, river otter, gray fox, red fox, kit fox, raccoon, beaver, badger, and muskrat.” **Mitigation Measure MM 4.4-12** (included below for reference) protects active dens at all times of the year, including pupping season, by requiring a 50-foot buffer from all active dens. The 50-foot buffer would only be un-enforced during pupping season if the Lead Biologist determines that a den is inactive, thereby ensuring that desert kit fox and American badger are not taken at any time, consistent with applicable regulations.

MM 4.4-12: If potential American badger or desert kit fox dens are found during pre-construction surveys, the status of the dens shall be evaluated by the Lead Biologist(s) or their designee no more than 30 days prior to project ground disturbance.

a. If the Lead Biologist(s) determines that the den(s) are inactive, den(s) shall be collapsed by the Lead Biologist(s) to prevent occupation of the den(s) between the time of the preconstruction survey and construction activities.

b. If the Lead Biologist(s) determines that the den(s) are active, construction activities shall not occur within 50 feet of an active badger den or 100 feet of an active kit fox den, unless otherwise approved by the Lead Biologist(s).

c. If the Lead Biologist(s) determines that potential den(s) outside of the pupping season may be active, a passive relocation program can occur. The pupping season is defined as March 15–July 31 for American badger and February 1–August 31 for desert kit fox. The program shall consist of determining status of the den(s) (confirming it is a nonmaternity den through remote camera monitoring), excluding American badger or desert kit fox from the occupied nonmaternity den(s) by installation of one-way doors at burrow entrances, monitoring of the den for a minimum of 48 hours to confirm usage has been discontinued, and excavation and collapse of the den.

In addition to **Mitigation Measure MM 4.4-12**, the project is subject to various other measures that would limit the potential for impacts to both species, which require a Lead Biologist to oversee all biological mitigation measures **(MM 4.4-1)**; implementation of a Worker Environmental Awareness Training Program **(MM 4.4-2)**; general avoidance and protective measures designed to avoid impacts to special-status species during construction, operations and maintenance, and decommissioning activities **(MM 4.4-3 and MM 4.4-4);** pre-construction surveys for special-status species **(MM 4.4-5)**; final fencing plan in coordination with requisite agencies **(MM 4.4-3)**; implementing a Trash Abatement Program **(MM 4.4-3)**; minimizing impacts to native vegetation and revegetating temporarily disturbed areas with native vegetation **(MM 4.4-15)**; Fugitive Dust Control Plan **(MM 4.3-2)**; use of approved herbicides **(MM 4.9-2 and MM 4.4-21)**; and reducing noise levels associated with construction **(MM 4.13-1 through 4.13-3)**.

This comment has been noted for the record and does not raise any new substantive issues beyond those evaluated and disclosed in the Draft EIR; no revisions to the Draft EIR are necessary.

3-L

The comment notes botanical survey findings that approximately 31,647 alkali mariposa lily individuals were documented within the project site. The commenter summarizes proposed **Mitigation Measure MM**

4.4-6, which requires the preparation of a Habitat Mitigation Plan (HMP) if the project would permanently impact more than 10% of the alkali mariposa lily local population. The DEIR determines that approximately 3.7-3.9% of the local alkali mariposa lily population would be permanently impacted by the project, falling below the 10% threshold that would require the preparation of an HMP per Mitigation Measure **MM 4.4-6**. CDFW does not concur with this conclusion and proposes the following mitigation measures:

CDFW recommends the project implement **MM 4.4-6** and prepare a Habitat Mitigation Plan for alkali mariposa lily. CDFW recommends removing the 10% threshold from the measure and recommends that the Habitat Mitigation Plan be developed in coordination with CDFW.

CDFW recommends the project avoid alkali mariposa lily to the greatest extent feasible by incorporating mitigation delineating and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population or specific habitat type required by alkali mariposa lily. CDFW recommends these buffers be implemented in areas that would not be directly impacted by project activities.

Further, CDFW states that a more thorough analysis of potential impacts to alkali mariposa lily is warranted within the DEIR. Recommendations include providing more information regarding how the ground disturbance and infrastructure associated with solar arrays will impact alkali mariposa lily. The commenter references two studies: one suggesting that bulldozing creates unfavorable soil conditions for desert plants and increases invasive species when compared to mowing; and another that suggests that solar panel installation has caused varied effects on desert vegetation, depending on plant community and soil characteristics.

Solar photovoltaic arrays can create distinct microclimates beneath and between panels by reducing incoming solar radiation, lowering soil temperatures, altering wind patterns, and redistributing precipitation and runoff. In arid-site field studies, areas that are shaded by solar panels have been measured to retain higher relative humidity and soil moisture than unshaded areas, while also showing cooler soil temperatures (Zhang et al., 2024). For alkali mariposa lily, which occurs in alkaline, mesic microhabitats, solar panel induced changes in shading, soil moisture persistence, and runoff distribution have the potential to improve habitat suitability at the microsite scale. Therefore, based on this general study, there is the potential that the presence of the solar panels may improve habitat for the species within the project site.

The Draft EIR reflects the statement in the comment that in-situ preservation of onsite populations is biologically superior to high-risk translocation or salvage efforts. In alignment with this priority, the project is designed to allow alkali mariposa lilies to persist in-situ. Over 87 percent of the mapped population lies within temporary impact areas (such as beneath solar panels). Because solar panels are elevated and do not create a continuous impermeable barrier, and because vegetation management will rely on mowing rather than grading or clearing, the native soil, hydrology, and seed bank will remain intact. The species' specialized seed bank is adapted to remain dormant during dry years and germinate in wetter years, ensuring its long-term persistence within the solar field throughout project operations. To protect avoided on-site populations from indirect construction and operation impacts, the project will implement **Mitigation Measure MM 4.3-2** (Fugitive Dust Control Plan), **Mitigation Measure MM 4.4-21** (Weed Control Plan), and **Mitigation Measure MM 4.9-2** (strict restrictions on herbicide use).

Mitigation Measure MM 4.4-6 has been revised as follows:

> **MM 4.4-6:** Alkali mariposa lily, a rare plant species with a California Native Plant Society rank of 1.B2 was documented as present on the project site. If the project would eliminate more than 10

percent of the local population, a Habitat Mitigation Plan would be prepared and would include the following:

a. A figure illustrating the area of the population to be preserved, and the area of the population to be removed;

b. Identification of on-site or off-site preservation, restoration, or enhancement location(s) and avoidance of those locations through the establishment of preservation areas and/or buffers;

c. Methods for preservation, restoration, enhancement, and/or population translocation;

d. A replacement ratio ~~and success standard criteria~~of 1:1 for occupied habitat or an alternative equivalent mitigation in coordination with the C~~c~~ounty;

e. A five-year monitoring program to ensure mitigation success in accordance with the following survivorship percentage performance standard:

   i. Because the plant lives above-ground during only a portion of its lifecycle, a minimum of 90 percent survival during one or more of the monitoring periods shall be considered success for this species.

f. Adaptive management and remedial measures in the event that performance standards are not achieved; and

g. Financial assurances and a mechanism for conservation of any mitigation lands required in perpetuity.

A 1:1 mitigation ratio for occupied habitat is considered sufficient because alkali mariposa lily is not federally or state listed as threatened or endangered and is relatively common in the project area. Copies of all surveys and reports shall be submitted to the Kern County Planning and Community Development Department.

Potential impacts to alkali mariposa lily would be reduced through implementation of **Mitigation Measures MM 4.4-5**, which require conducting pre-construction surveys for special-status plants, and **MM 4.4-6**. Given that permanent impacts only represent approximately 3.7 percent of the point-mapped population and 3.9 percent of the polygon-mapped population is to be low and localized, and impacts to alkali mariposa lily would be well below the 10 percent threshold identified in **Mitigation Measure MM 4.4-6**. Nonetheless, with implementation of **Mitigation Measures MM 4.4-5** and **MM 4.4-6**, impacts to alkali mariposa lily would be reduced to less than significant.

Mitigation Measure MM 4.4-6 includes appropriate performance standards and implementation actions to address impacts should permanent impacts exceed the 10 percent threshold. The measure requires development of an HMP if the 10 percent threshold is triggered. The measure explicitly requires that the HMP contains identification of on-site or off-site preservation, restoration, or enhancement location(s), methods for translocating populations, a 1:1 mitigation ratio for occupied habitat, a 5-year monitoring program to verify mitigation success, remedial measures and adaptive management actions to be taken if performance standards are not met, and financial assurances and a mechanism for conservation of any mitigation lands required in perpetuity.

Finalizing operational details such as preemptively working with a nursery to propagate the species prior to EIR approval is not appropriate given the analysis in the document and the expectation of impacts to the local population. Precise construction timelines, final engineering layouts, and updated pre-construction survey counts, which fluctuate based on seasonal rainfall, are necessary to develop the HMP (if required). **Mitigation Measure MM 4.4-6** ensures that any required mitigation is tailored to real-time, site-specific conditions while maintaining strict performance standards.

In the event that the 10 percent threshold is triggered and salvage becomes necessary, the HMP would outline specific collection, salvage, and transplant protocols in coordination with Kern County. This collaborative process ensures that any salvage efforts utilize the most up-to-date scientific methods and are adapted to the specific conditions of the local population.

Regarding hydrological and runoff impacts, solar arrays do not create solid, continuous, impermeable barriers. Rainwater falling on panels will shed directly onto the pervious soils beneath the arrays, maintaining local soil moisture and infiltration. To prevent changes in local hydrology, **Mitigation Measure MM 4.10-2** (Final Drainage Plan) requires the project to maintain pre-construction drainage patterns, topography, and flows to the maximum extent feasible. This ensures that the hydrological regime supporting the alkali mariposa lily on-site is preserved during project operations.

The Draft EIR proposes measures to minimize and mitigate potential impacts to alkali mariposa lily to the extent feasible and adequately discloses the potential impacts to alkali mariposa lily. No revisions to the Draft EIR or additional mitigation measures are required.

3-M

The commenter quotes "**Mitigation Measure MM 4.4-4 (p)**" (corrected below to assume reference to **MM 4.4-3**), regarding the installation of wildlife friendly fencing. CDFW concurs with the incorporation of wildlife friendly fencing but does not concur with the use of portals compared to a continuous gap, as this may increase the potential for predation of DKF and other species. Instead, the commenter recommends perimeter fencing be installed with a continuous four-to-six-inch gap in the bottom, knuckled back to allow wildlife to pass through.

Measure **MM 4.4-3 (p)** states that the perimeter security fence will be designed either with portals in the fence, or that the fence will be continuously raised 4 to 7 inches above the ground. **Mitigation Measure MM 4.4-3 (p)** was revised to remove references to portals and to reference that the wildlife fence design will be consistent with permits issued by USFWS or CDFW. See revised measure below:

q. To enable kit foxes and other wildlife (e.g., American badger) to pass through the project site after construction, the permanent perimeter security fence around the solar field shall be a wildlife friendly design that meets the goals of allowing wildlife to move freely through the project site during operation. The fence around the solar field ~~leaving 4- to 7-inch openings or portals in the fence or the fence~~ shall be raised 4 to 7 inches above the ground leaving a gap between the fence mesh and the ground.~~, or as approved by USFWS or CDFW. In the latter case t~~ The bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that passes under the fence. Should this measure conflict with permits (ITP) issued by USFWS or CDFW, the measures in the ITP shall prevail.

3-N

This comment notes the Draft EIR cumulative impacts analysis for biological resources is too broad and does not adequately evaluate impacts to specific biological resources. The commenter recommends that the cumulative impacts analysis focus on each specific resource instead of the project.

Under CEQA, an EIR must discuss a cumulative impact if the project's incremental effect combined with the effects of other projects is "cumulatively considerable" (CEQA Guidelines §15130([a]). This determination is based on an assessment of the project's incremental effects "viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines §15065[a][3]). The CEQA Guidelines set forth two methods for satisfying the cumulative impacts analysis requirement: the list-of-projects approach and the summary-of-projections approach. Under either method, the EIR must summarize the expected environmental effects of the project and related projects, provide a reasonable analysis of cumulative impacts, and examine reasonable options for mitigating or avoiding the project's contribution to any significant cumulative impacts (CEQA Guidelines §§15130[b][1][A]–[B], 15130[b][4]–[5]). An EIR's discussion of cumulative impacts need not provide the same level of detail as is provided for project-specific effects. The discussion of cumulative impacts should be guided by standards of practicality and reasonableness (CEQA Guidelines §15130[b]. *See Golden Door Props., LLC v. County of San Diego* [2020] 50 Cal.App.5th 467, 529; *Rodeo Citizens Ass'n v. County of Contra Costa* [2018] 22 Cal.App.5th 214, 232; *Banning Ranch Conservancy v. City of Newport Beach* [2012] 211 Cal.App.4th 1209, 1228; *City of Long Beach v. Los Angeles Unified Sch. Dist*. [2009] 176 Cal.App.4th 889; *Cadiz Land Co. v. Rail Cycle* [2000] 83 Cal.App.4th 74, 102; *East Bay Mun. Util. Dist. V. Department of Forestry & Fire Protection* [1996] 43 Cal.App.4th 1113, 1127). A general, qualitative analysis is sufficient as long as the impacts are not minimized or ignored (*Al Larson Boat Shop, Inc. v. Board of Harbor Comm'rs* [1993] 18 Cal.App.4th 729, 749). There is no requirement that cumulative impacts be quantified or that the data be presented in a particular format. (*Citizens for Open Gov't v. City of Lodi* [2012] 205 Cal.App.4th 296, 320 n10). A disagreement over the method used to assess cumulative impacts is not a basis for rejecting an EIR's analysis as inadequate (CEQA Guidelines §15151). A reasonable, good faith effort to disclose the impact is sufficient. (*See Citizens for Open Gov't v. City of Lodi* [2012] 205 Cal.App.4th 296, 320; *Greenebaum v City of Los Angeles* [1984] 153 Cal.App.3d 391, 411). A lead agency is entitled to rely on its own experts and consultants when choosing an appropriate methodology for assessing cumulative impacts (*South of Mkt. Community Action Network v. City & County of San Francisco* [2019] 33 Cal.App.5th 321, 339). The agency's choice of methodology will be upheld if supported by substantial evidence. (*League to Save Lake Tahoe Mtn. Area Preservation Found. v. County of Placer* [2022] 75 Cal.App.5th 63, 150).

The Draft EIR utilizes the list-of-projects approach and evaluates potential cumulative biological resources impacts of the project and proposed, existing, and permitted projects throughout the Antelope Valley bioregion. The analysis considers special-status species relevant for the bioregion and the impacts of project and related cumulative projects, including western burrowing owl, Swainson's hawk, golden eagle, American badger, and desert kit fox. The Draft EIR analysis discloses cumulative impacts to these species due to the cumulative loss of foraging and nesting habitat, requires implementation of mitigation measures to reduce these impacts, and determines that impacts to these special-status wildlife species are significant and unavoidable. Similarly, the Draft EIR discloses impacts to rare plants, including alkali mariposa lily and western Joshua tree, imposes mitigation measures to reduce those impacts, and determines cumulative impacts to rare plant species are less than significant with mitigation incorporated, with the exception of WJT, which would be significant and unavoidable. Cumulative impacts due to development contributing

to an increase in common raven populations that prey upon sensitive species, impacts to wildlife movement, and impacts to migratory birds are also discussed, mitigation measures are required, and cumulative impacts were determined to be less than significant with mitigation incorporated. The Draft EIR analysis provides a reasonable analysis of cumulative impacts to biological resources, consistent with the requirements of CEQA. No revisions to the Draft EIR or additional mitigation measures are required.

3-O

The comment summarizes CDFW's Lake or Streambed Alteration Agreement (LSAA) authority (Fish & Game Code §1600 et seq.) and requests notification and coordination where project activities would substantially alter stream or lake bed, bank, or channel. The County acknowledges CDFW's LSAA authority and confirms that the Draft EIR and supporting technical reports disclose and evaluate potentially jurisdictional aquatic features within the Study Area.

Specifically, the Draft EIR and jurisdictional mapping identify 40 potentially jurisdictional features totaling approximately 2.45 acres and 72,452 linear feet within Study Area. These features are shown and discussed in Draft EIR **Section 4.4**, *Biological Resources,* and the associated technical appendices (including the Aquatic Resources Delineation Report and jurisdictional delineation figures included in **Appendix E8** to the Draft EIR). The Draft EIR also describes the potential for project activities (e.g., grading, trenching, and placement of infrastructure) to affect bed/bank/channel features and identifies mitigation commitments and permitting coordination as part of **Mitigation Measure MM 4.4-23**.

The project proponent will coordinate with CDFW and will provide required notification and obtain an LSAA prior to commencing activities that may substantially divert, obstruct, or change any river, stream, or lake (including ephemeral and intermittent features). This comment has been noted for the record; the Draft EIR already discloses and evaluates impacts to potentially jurisdictional waters and identifies mitigation and permit coordination requirements, and no revisions to the Draft EIR are necessary in response to this comment.

Mitigation Measure MM 4.4-23 is provided below for reference.

> **MM 4.4-23:** If the Regional Water Quality Control Board (RWQCB) and/or California Department of Fish and Wildlife (CDFW) jurisdictional resources cannot be avoided, the project proponent/operator shall be subject to provisions as identified below:
>
> a. Prior to ground disturbance activities that could impact RWQCB and/or CDFW jurisdictional resources, the project proponent/operator shall consult with the RWQCB to obtain Waste Discharge Requirements (WDRs) and/or CDFW to obtain a Lake and Streambed Alteration Agreement (LSAA). Permits shall be obtained prior to disturbance of jurisdictional resources.
>
> b. The project proponent/operator shall comply with all avoidance, minimization, and compensatory mitigation measures, as set forth in permits issued to the project by RWQCB and/or CDFW.
>
> c. Copies of coordination, proof of compliance, documentation of any mitigation, along with copies of permits obtained from the RWQCB and/or CDFW

3-P

The comment notes that CNDDB is compiled from voluntary reports and that absence of a record does not preclude species presence. The County acknowledges this and confirms that the Draft EIR relies on targeted, multi-year field surveys conducted by qualified biologists to establish the project biological baseline rather than only CNDDB records. Specifically, the project's multi-year survey program (2023–2026) included vegetation/community mapping and botanical inventories, DETO protocol presence/absence surveys, burrowing owl burrow surveys, desert kit fox den surveys, SWHA protocol surveys, golden eagle and condor surveys, jurisdictional aquatic feature delineation, a MGS potential for occurrence assessment memorandum, and WJT population and woodland mapping. All of these surveys and assessments were performed by qualified biologists using appropriate seasonal windows and accepted protocols as documented in Draft EIR **Section 4.4,** *Biological Resources,* and the Biological Resources Summary and appendices. The comment has been noted for the record; no revisions to the Draft EIR are necessary.

3-Q

The comment notes that CEQA requires that any special-status species and natural communities detected during project surveys be entered into CNDDB and provides links to do so. The comment has been noted for the record; no revisions to the Draft EIR are necessary.

3-R

This comment indicates the proposed project would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. In response, CDFW filing fees will be paid at the time of filing the Notice of Determination in accordance with Fish and Game Code Section 711.4. The comment has been noted for the record; no revisions to the Draft EIR are necessary.

3-S

The comment is conclusionary, providing contact information for CDFW staff, and has been noted for the record; no revisions to the Draft EIR are necessary. The County thanks the author for their comments and participation in the public review of the environmental document.

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Local Agencies

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Comment Letter 4: Kern County Superintendent of Schools

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KCSOS
Kern County Superintendent of Schools
Office of John G. Mendiburu, Ed.D. — Advocates For Children

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May 15, 2026

Kern County Planning Department
Attn: Mark Tolentino, Planner III
2700 M Street, Suite 100
Bakersfield, CA 93301

Our File No.: CO26-0082

RE: DEVELOPER FEES FOR: Notice of Prep Draft EIR for Galaxy Solar; Map No. 195-28, 32-34, 212-3, 4, 6, 8, 9
(Approximately 6 miles SE of Mojave, 8 miles NE of Rosamond and 8 miles NW of the main base of Edwards Air Force Base)

Dear Mr. Tolentino,

This office represents the Mojave Unified School District with regard to the imposition of school impact fees and appreciates the opportunity to respond on behalf of the district regarding the proposed project. This letter is limited to addressing the possible effects which the project might have on school facilities created by students attributable to the project. It is not intended to address other possible environmental concerns which might be identified by the district(s) after reviewing it. A

It is our determination that the above-mentioned Notice of Preparation of a Draft Environmental Impact Report for the Galaxy Solar Project proposing a multiple Conditional Use Permits, Zone Changes, General Plan Amendments, Zone Variances and Vesting Tentative Parcel Maps 12577, 12578, 12579, 12580, 12581, and 12582 to allow the construction and operation of a photovoltaic solar facility on approximately 3,400-acres, across 162 privately owned parcels will not have significant will not have significant effects on the district's facilities so long as statutory school facilities fees are collected as required by law and that no further mitigation measures regarding school facilities are necessary. B

Thank you for the opportunity to comment on the project. Should you have any questions, or if we can be of any further assistance in this matter, please contact me at 636-4599, or through e-mail at anwatson@kern.org.

Sincerely,

Andrea Watson, Specialist
School District Facility Services

Cc: Districts

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Response to Comment Letter 6: Kern County Superintendent of Schools

4-A

The comment expresses appreciation for the opportunity to respond on behalf of the district regarding the project. This comment clarifies that the letter's contents are intended to address possible effects that the project may have on school facilities, and not to comment on any other environmental concerns.

4-B

The commenter states that the Kern County Superintendent of Schools affirms that the project would not have significant impacts on the Mojave Unified School District. The proposed project will incorporate a standard condition of approval as part of the requested Conditional Use Permits that requires the payment of all statutory fees at the time of issuance of building permits. This comment does not raise a substantive issue on the content of the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not required. The County thanks the author for their comments and participation in the public review of the environmental document.

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Comment Letter 5: Yuhaaviatam of San Manuel Nation (YSMN)

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Mark Tolentino

From: Eunice Ambriz-Aguilar <Eunice.Ambriz@sanmanuel-nsn.gov>
Sent: Friday, May 15, 2026 10:39 AM
To: Mark Tolentino
Cc: Jason Laird; Kristen Tuosto
Subject: AB52: Galaxy Solar PV and Storage Project (PP25404), Kern County Planning and Natural Resources Department [COU-KERN-2025-9]

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or provide information unless you recognize the sender and know the content is safe.

Good morning,

Thank you for giving us the opportunity to review the Draft EIR. After reviewing it we have no additional concerns. Please provide the final copy of the project/permit/plan conditions when ready. A

Additionally, please reach out to Jason Laird, cc'd here for more information on hiring approved YSMN Tribal Monitors for the project.

Kind regards,
Eunice

Eunice Ambriz-Aguilar
Cultural Resources Technician
Eunice.Ambriz@sanmanuel-nsn.gov
O:(909) 864-8933 x 50-2033
M:(909) 649-4867
26569 Community Center Dr Highland, California 92346



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Response to Comment Letter 5: YSMN

5-A

The comment expresses gratitude for the opportunity to review the Draft EIR for the project and states no concerns regarding impacts to Tribal Cultural Resources. The commenter requests a copy of the Final EIR and gives a contact to coordinate with for hiring approved YSMN Tribal Monitors for the project. The comment has been noted for the record, and revisions to the Draft EIR are not required. The County thanks the author for their comment and participation in the public review of the environmental document.

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Comment Letter 6: Kern County Fire Department

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Office of the Fire Marshal
Kern County Fire Department
Fire Prevention Unit

2820 M St. • Bakersfield, CA 93301 • www.kerncountyfire.org
Telephone 661-391-3310 • FAX 661-636-0466/67 • TTY Relay 800-735-2929

June 4, 2026

Kern County Planning and Natural Resources Department
2800 M St., Bakersfield, CA 93301
Attn.: Mark Tolentino, Planner III

Re: Kern County Fire Department Comments Regarding Planning Department Project

To Whom It May Concern,

The Kern County Fire Department (KCFD), as the local fire authority, has received a request for comments regarding Galaxy Solar Project by Galaxy Solar Storage, LLC (PP25404). Upon initial review, it has been determined that all ground mounted solar array projects over 1MW will require Fire Department plan review prior to construction and meet requirements set forth in KCFD Solar Panel Standard. Solar array projects over 20MW will require special fee calculation from KCFD prior to permit issuance. A

All Battery Energy Storage Systems must be applied for directly with KCFD for separate permitting and pre-construction approval. All proposed batteries must be UL9540A 2019 4th Edition tested for large scale burns to determine adequate design and mitigation measures. Additionally, the 24,000 gallon fire water tank and fire alarm annunciator panel (Incident Command Post) must be located a minimum of 300' upwind from the nearest battery enclosure. Site emergency response access for the storage yards is preferred to be placed upwind of battery enclosures based on the prevailing winds in the area of construction. B

A more detailed review and project comments will be conducted when the building permit is obtained, and plans are submitted to KCFD. C

Please feel free to call our Fire Prevention Office at (661) 391-3310 with any questions.

Respectfully,
Kaylee Schoenheide
Fire Plans Examiner
Kern County Fire Department

Office of the Fire Marshal
Kern County Fire Department
Fire Prevention Unit

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3/3/2022

The Kern County Fire Department "Energy Storage System Review Guide Sheet and CFC Sections [A] 105.4 and 1206.1.3 are clear in what is required to be submitted as part of the application for a permit to install an ESS. The current code requirements took effect July 1, 2021, and KCFD has routinely distributed the review guide to assist applicants.

The following submission procedures will take effect immediately:

1. Submitted plans and documents must be under the signature and seal of CA Licensed design professional.
2. Applications will be reviewed as to completeness based upon the KCFD ESS Review Guide Sheet and the CFC. If any required submittal item is missing the application will be deemed incomplete and the application rejected until such time that a complete package is submitted.
3. Once an application is accepted for review, any updated submittals during the period of review, installation and final inspections must either be signed and sealed by the design professional of record, or a cover letter signed and sealed by the design professional of record shall accompany the submittal, attesting that the updated information conforms to the overall design and code requirements.
4. HMA, Fire Risk Analysis, fire suppression and deflagration protection analysis submittals shall be from a CA Licensed Fire Protection Engineer approved by the Kern County Fire Department per CFC Section [A]104.7.2. Submittals will require signature and seal.
5. Fire protection system submittals such as fire suppression and water supply shall include a C-16 - Fire Protection Contractor of record.
6. Fire alarm systems, fire detection, gas detection shall include a C-10 - Electrical Contractor of record.
7. No batteries over 50% State of Charge (SOC) shall be brought to a site until necessary fire protection and other safety systems have been commissioned and accepted. Documentation on the SOC shall be provided prior to batteries being brought to a site.
8. ESS are required to meet all the requirements of the CFC and Kern County Fire Department requirements, any ESS not meeting core safety requirements will be rejected.
9. Final approvals of any ESS or safety related equipment that has routine maintenance requirements according to the code or manufacturer's instructions will not receive approval inspections until a maintenance plan has been submitted and approved by KCFD.

Office of the Fire Marshal
Kern County Fire Department
Fire Prevention Unit

2820 M St. • Bakersfield, CA 93301 • www.kerncountyfire.org
Telephone 661-391-3310 • FAX 661-636-0466/67 • TTY Relay 800-735-2929

December 13, 2023

Dear Customer,

Kern County Fire Department (KCFD) is bringing to your attention a requirement for testing and maintenance of all systems requiring routine maintenance, particularly life safety, fire protection and detection systems at all Operational and Conditionally Approved Battery Energy Storage System (BESS) projects. The manufacturer's instructions for systems and components along with NFPA 68, NFPA 69, NFPA 72, NFPA 2001, NFPA 13, NFPA 22, NFPA 24, NFPA 25 & NFPA 10 and California Fire Code Section 109 require regular testing, inspection, and maintenance to keep the fire and life safety systems properly maintained and operationally ready. Continued Conditional Operational Approval is based on maintaining all fire and life safety systems in good working order, free from deficiencies and following all referenced standards and manufacturer's suggested guidelines from the date a subsystem is commissioned and/or the ESS receives Conditional Operational Approval.

Below are the NFPA codes and frequency of inspection and testing to be performed:

NFPA 10 – Portable Fire Extinguishers			Annually
NFPA - 13, 24 & 25 – Sprinklers/water supply/fire pump	Quarterly	Semi-Annually	Annually
NFPA 68 – Explosion Protection/Deflagration Venting	Every maintenance turnaround		Annually
NFPA 69 – Standard on Explosion Prevention Systems	Quarterly	Every maintenance turnaround	
NFPA 72 – Fire Alarm Systems		Semi-Annually	Annually
NFPA 2001 – Clean Agent Suppression		Semi-Annually	Annually

Fire Code Compliance Testing and Inspection involves having a Licensed Technician perform visual and physical testing of fire and life systems for functionality. All Testing and Inspection Certification documentation, signed by a licensed technician, shall be available for review by the Fire Authority upon request and/or be submitted to Kern County Fire Department's Fire Prevention Unit. KCFD reserves the right to visit any battery energy storage site and request to see testing and maintenance records. Any system discrepancies shall be addressed and all resolution documentation for repairs kept on record.

Regarding testing and maintenance of critical system components related to system safety, life safety, fire detection, fire suppression and concentration reduction systems, not directly addressed in NFPA Standards nor fire code sections, please have your Fire Protection Engineer provide a proposal on the service schedules based on the environmental conditions present at site using the manufacturer's guidelines as a starting point. Reference to the above requirements and the required routine testing and maintenance schedules of the ESS installation are required to be part of your KCFD SSB permit submittal under operation and maintenance documentation CFC 1207.2.1, Items 8 and 10 and CFC 1207.2.2.

If you have any questions, feel free to email our Fire Prevention Office at:
fireprevention@kerncountyfire.org

Regards,
Matt Redstone, Assistant Fire Marshal
Kern County Fire Department
Fire Prevention

Kern County Fire Department
Energy Storage System Review Guide Sheet
California Fire Code / NFPA 855

EXTRACTS ONLY: SEE COMPLETE CFC and NFPA 855 FOR DETAILS

Project Name: _____

Location: ……_____

Date: _____

Reviewer: _____

Administrative

SECTION 101
SCOPE AND GENERAL REQUIREMENTS

[A] 101.2 Scope. This code establishes regulations affecting or relating to structures, processes, premises and safeguards regarding all of the following:

1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices.

2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises.

3. Fire hazards in the structure or on the premises from occupancy or operation.

4. Matters related to the construction, extension, repair, alteration or removal of fire protection systems.

5. Conditions affecting the safety of fire fighters and emergency responders during emergency operations.

[A] 101.3 Purpose. The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.

SECTION 102
APPLICABILITY

[A] 102.1 Construction and design provisions. The construction and design provisions of this code shall apply to:

1. Structures, facilities and conditions arising after the adoption of this code.
2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
3. Existing structures, facilities and conditions where required in Chapter 11.
4. Existing structures, facilities and conditions that, in the opinion of the fire code official, constitute a distinct hazard to life or property.

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[A] 102.7 Referenced codes and standards.
The codes and standards referenced in this code shall be those that are listed in Chapter 80, and such codes and standards shall be considered to be part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2.

[A] 102.7.1 Conflicts.
Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

[A] 102.7.2 Provisions in referenced codes and standards.
Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

[A] 102.8 Subjects not regulated by this code. Where applicable standards or requirements are not set forth in this code, or are contained within other laws, codes, regulations, ordinances or bylaws adopted by the jurisdiction, compliance with applicable standards of the National Fire Protection Association or other nationally recognized fire safety standards, as approved, shall be deemed as prima facie evidence of compliance with the intent of this code. Nothing herein shall derogate from the authority of the fire code official to determine compliance with codes or standards for those activities or installations within the fire code official's jurisdiction or responsibility.

[A] 102.9 Matters not provided for. Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, that are not specifically provided for by this code, shall be determined by the fire code official.

[A] 102.10 Conflicting provisions.
Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in a specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

SECTION 104
DUTIES AND POWERS OF THE FIRE CODE OFFICIAL

[A] 104.1 General. The fire code official is hereby authorized to enforce the provisions of this code.

[A] 104.2 Determination of compliance. The fire code official shall have the authority to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the fire code official.

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[A] 104.2.2 Technical assistance. To determine compliance with this code, the fire code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

[A]104.2.2.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

[A]104.2.2.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The fire code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A]104.2.2.3 Content. The technical opinion and report shall analyze the properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon to identify and propose necessary recommendations.

[A]104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the fire code official shall have the authority to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the fire code official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the fire code official.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the fire code official shall be constructed and installed in accordance with such approval.

[A] 104.9.1 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working order and approved.

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Chapter 2
Definitions

SECTION 202
GENERAL DEFINITIONS

ENERGY *STORAGE* MANAGEMENT SYSTEMS. An electronic system that protects *energy* storage *systems* from operating outside their safe operating parameters and *disconnects electrical power to the ESS or places it in a safe condition if potentially hazardous temperatures or other conditions are detected.*

ENERGY STORAGE SYSTEM (ESS). *One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time.*

ENERGY STORAGE SYSTEM, ELECTROCHEMICAL. *An energy storage system that stores energy and produces electricity using chemical reactions. It includes, among others, battery ESS and capacitor ESS.*

ENERGY STORAGE SYSTEM, MOBILE. *An energy storage system capable of being moved and utilized for temporary energy storage applications, and not installed as fixed or stationary electrical equipment. The system can include integral wheels for transportation, or be loaded on a trailer and unloaded for charging, storage and deployment.*

ENERGY STORAGE SYSTEM, STATIONARY. *An energy storage system installed as fixed or stationary electrical equipment in a permanent location.*

ENERGY STORAGE SYSTEM, WALK-IN UNIT. *A prefabricated building that contains energy storage systems. It includes doors that provide walk-in access for personnel to maintain, test and service the equipment, and is typically used in outdoor and mobile ESS applications.*
(If more than just your arms can enter it is a walk-in unit. Design appropriately)

ENERGY STORAGE SYSTEM CABINET. *An enclosure containing an energy storage system and meeting the applicable requirements the listing for the system. Personnel are not able to enter the enclosure, other than reaching in to access components for maintenance purposes.*
(No more than arms reach entry)

ENERGY STORAGE SYSTEM COMMISSIONING. *A systematic process that provides documented confirmation that an energy storage system functions according to the intended design criteria and complies with applicable code requirements.*

ENERGY STORAGE SYSTEM DECOMMISSIONING. *A systematic process that provides documentation and procedures that allow an energy storage system to be safely de-energized, disassembled, readied for shipment or storage, and removed from the premise in accordance with applicable code requirements.*

OCCUPANCY CLASSIFICATION. For the purposes of this code, certain occupancies are defined as follows:

> **[BG] Factory Industrial F-1 Moderate-hazard occupancy.**
> (other examples remain unchanged)
>
> *Energy storage systems (ESS) in dedicated use buildings*

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Permits Required

SECTION 105
PERMITS

[A] 105.1 General. Permits shall be in accordance with Sections 105.1.1 through 105.6.25.

[A] 105.1.1 Permits required. A property owner or owner's authorized agent who intends to conduct an operation or business, or install or modify systems and equipment that are regulated by this code, or to cause any such work to be performed, shall first make application to the fire code official and obtain the required permit.

[A] 105.6 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Sections 105.6.1 through 105.6.25.

☐ **105.6.6 Energy storage systems.** A construction permit is required to install energy storage systems regulated by Section 1207.

☐ **[A]105.6.10 Fuel cell power systems.** A construction permit is required to install stationary fuel cell power systems.

1207 ESS
1207.1General.
The provisions in this section are applicable to stationary and mobile electrical energy storage systems (ESS).

Exception: ESS in Group R-3 and R-4 occupancies shall only be required to comply with Section 1207.11 except where Section 1207.11.4 requires compliance with Sections 1207.1 through 1207.9.

1207.1.3 Scope.
ESS having capacities exceeding the values shown in Table 1207.1.3 shall comply with this section.

TABLE 1207.1.3—ENERGY STORAGE SYSTEM (ESS) THRESHOLD QUANTITIES

TECHNOLOGY	ENERGY CAPACITY[a]
Capacitor ESS	3 kWh
Flow batteries[b]	20 kWh
Lead-acid batteries, all types	70 kWh[c]
Lithium-ion batteries	20 kWh
Nickel-cadmium (Ni-Cd), nickel metal hydride (Ni-MH) and nickel zinc (Ni-Zn) batteries	70 kWh
Nonelectrochemical ESS[d]	70 kWh
Other battery technologies	10 kWh
Other electrochemical ESS technologies	3 kWh
Sodium nickel chloride batteries	70 kWh
Zinc manganese dioxide batteries ($Zn\text{-}MnO_2$)	70 kWh

For SI: 1 kilowatt hour = 3.6 megajoules.

a. Energy capacity is the total energy capable of being stored (nameplate rating), not the usable energy rating. For units rated in amp-hours, kWh shall equal rated voltage times amp-hour rating divided by 1,000.
b. Shall include vanadium, zinc-bromine, polysulfide-bromide and other flowing electrolyte-type technologies.
c. Fifty gallons of lead-acid battery electrolyte shall be consideredequivalent to 70 kWh.
d. Covers nonelectrochemical technologies such as flywheel and thermal ESS.

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1207.1.2 Permits.
Permits shall be obtained for ESS as follows:

1. Construction permits shall be obtained for stationary ESS installations and for mobile ESS charging and storage installations covered by Section 1207.10.1. Permits shall be obtained in accordance with Section 105.6.6.

901 Fire Protection Generally

901.3 Permits. Permits shall be required as set forth in Sections 105.5 and 105.6.

☐ **[A] 105.6.1 Automatic fire-extinguishing systems.** A construction permit is required for installation of or modification to an automatic fire-extinguishing system, other than an automatic sprinkler system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit-**Permit applied through Fire Prevention Office**

☐ **[A] 105.6.7 Fire alarm and detection systems and related equipment**. A construction permit is required for installation of or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit-**Permit applied through Fire Prevention Office**

☐ **[A] 105.6.8 Fire pumps and related equipment.** A construction permit is required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers and generators. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit-**Permit applied through Fire Prevention Office**

☐ **[A] 105.6.19 Private fire hydrants.** A construction permit is required for the installation or modification of private fire hydrants. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit-**Permit applied through Fire Prevention Office**

901.4 Required water supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

901.5 Type of water supply. A water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

☐ **Private fire service mains**. Private fire service mains and appurtenances shall be installed in accordance with NFPA 24 as amended in Chapter 80-**Permit applied through Fire Prevention Office**

☐ **Water tanks**. Water tanks for private fire protection shall be installed in accordance with NFPA 22-**Permit applied through Fire Prevention Office <u>or</u> Building Department**

916 Gas Detection

916.2 Permits. Permits shall be required as set forth in Section 105.6.11.

☐ **[A] 105.6.11 Gas detection systems**. A construction permit is required for the installation of or modification to gas detection systems. Maintenance performed in accordance with this code is not considered a modification and shall not require a permit-**Permit applied through Fire**

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Prevention Office

Documentation Generally

Section 106 Construction documents.

[A] 106.1Submittals.
Construction documents and supporting data shall be submitted in two or more sets with each application for a permit and in such form and detail as required by the fire code official. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

☐ **[A] 106.2.1 Information on construction documents.**
Construction documents shall be drawn to scale on suitable material. Documents in a digital format are allowed to be submitted where approved by the fire code official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations as determined by the fire code official.

[A] 106.2.2 Fire protection system shop drawings.
Shop drawings for the fire protection system(s) shall be submitted to indicate compliance with this code and the construction documents, and shall be approved prior to the start of installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

[A] 106.2.3 Applicant responsibility.
It shall be the responsibility of the applicant to ensure that the construction documents include all of the fire protection requirements and the shop drawings are complete and in compliance with the applicable codes and standards.

[A] 106.2.4Approved documents.
Construction documents approved by the fire code official are approved with the intent that such construction documents comply in all respects with this code. Review and approval by the fire code official shall not relieve the applicant of the responsibility of compliance with this code.

CHAPTER 12
ENERGY SYSTEMS
1201.1 Scope. The provisions of this chapter shall apply to the installation, operation, maintenance, repair, retrofitting, testing, commissioning and decommissioning of energy systems used for generating or storing energy, including but not limited to energy storage systems under the exclusive control of an electric utility or lawfully designated agency. It shall not apply to equipment associated with the generation, control, transformation, transmission, or distribution of energy installations that is under the exclusive control of an electric utility or lawfully designated agency. Energy storage systems regulated by Section 1207 shall comply with this chapter, as appropriate, and NFPA 855.

SECTION 1207
ELECTRICAL ENERGY STORAGE SYSTEMS (ESS)
1207.1 General.
The provisions in this section are applicable to stationary and mobile electrical energy storage systems (ESS).

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ESS Specific Documentation-All Documentation to be sent via E-Mail through the SharePoint application

☐ **1207.1.5 Construction documents.** The following information shall be provided with the permit application:

1. Location and layout diagram of the room or area in which the ESS is to be installed.

2. Details on the hourly fire-resistance ratings of assemblies enclosing the ESS.

3. The quantities and types of ESS to be installed.

4. Manufacturer's specifications, ratings and listings of each ESS.
(Listings are key safety documentation to be included in the initial submittal.)

5. Description of energy (battery) management systems and their operation.

6. Location and content of required signage.

7. Details on fire suppression, smoke or fire detection, thermal management, ventilation, exhaust and deflagration venting systems, if provided.

8. Support arrangement associated with the installation, including any required seismic restraint.

9. A commissioning plan complying with 1207.2.1.

10. A decommissioning plan complying with 1207.2.3.

11. A fire safety and evacuation plan in accordance with Section 404.

+ 12. Site Plan with layout diagram of the cabinets, non-walk-in enclosures or walk-in enclosures in which the energy storage system is to be installed

+13. Size, location, distance between units, distance to exposures

+ 14. Fire Apparatus access

+ 15. Fire protection water supply, (hydrants, piping layout, water source)

NFPA 855-2023

4.2.1.3
The following test data, evaluation information, and calculations shall be provided in addition to the plans and specifications in 4.2.1.1 where required elsewhere in this standard:

(1) Fire and explosion testing data in accordance with 9.1.5

(2) Hazard mitigation analysis (HMA) in accordance with Section 4.4

(3) Calculations or modeling data to determine compliance with NFPA 68 and NFPA 69 in accordance with 9.6.5.6.3

(4) Other test data, evaluation information, or calculations as required elsewhere in this standard

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4.2.1.4
If modeling data is provided, validation of the modeling results shall also be included.

☐ **1207.1.6 Hazard mitigation analysis.** A failure modes and effects analysis (FMEA) or other approved hazard mitigation analysis shall be provided in accordance with Section 104.8.2 under any of the following conditions:

1. Where ESS technologies not specifically identified in Table 1207.1.3 are provided.

2. More than one ESS technology is provided in a single fire area where there is a potential for adverse interaction between technologies.

3. Where allowed as a basis for increasing maximum allowable quantities. See Section 1207.5.2.

4. Where required by the fire code official to address a potential hazard with an ESS installation that is not addressed by existing requirements.
+ Note: A HMA or Fire Risk Analysis prepared by an FPE will be required in all cases.

1207.1.4.1 Fault condition. The hazard mitigation analysis shall evaluate the consequences of the following failure modes. Only single failure modes shall be considered.

1. A thermal runaway condition in a single electrochemical ESS unit.

2. A mechanical failure of a nonelectrochemical ESS unit.

3. Failure of any battery (energy) management system or fire protection system within the ESS equipment that is not covered by the product listing failure mode effects analysis (FMEA).

4. Failure of any required protection system external to the ESS, including but not limited to ventilation (HVAC), exhaust ventilation, smoke detection, fire detection, gas detection or fire suppression system. (Material based on NFPA 855)

1207.1.4.2 Analysis approval. The fire code official is authorized to approve the hazardous mitigation analysis provided the consequences of the hazard mitigation analysis demonstrate:

☐ 1. Fires will be contained within unoccupied ESS rooms or areas for the minimum duration of the fire-resistance rated separations identified in Section 1207.7.4.

☐ 2. Fires involving the ESS will allow occupants or the general public to evacuate to a safe location. (Material based on NFPA 855).

☐ **1207.1.4.3 Additional protection measures.** Construction, equipment and systems that are required for the ESS to comply with the hazardous mitigation analysis, including but not limited to those specifically described in Section 1207 shall be installed, maintained and tested in accordance with nationally recognized standards and specified design parameters.

Guidance Only - Extracted language Copyright ICC and NFPA

Commissioning, decommissioning

1207.2 Commissioning, decommissioning, operation and maintenance. Commissioning, decommissioning, operation and maintenance shall be conducted in accordance with this section.

☐ **1207.2.1 Commissioning.** Commissioning of newly installed ESS, and existing ESS that have been retrofitted, replaced or previously decommissioned and are returning to service shall be conducted prior to the ESS being placed in service in accordance with a commissioning plan that has been approved prior to initiating commissioning. The commissioning plan shall include the following:

1. A narrative description of the activities that will be accomplished during each phase of commissioning including the personnel intended to accomplish each of the activities.

2. A listing of the specific ESS and associated components, controls and safety related devices to be tested, a description of the tests to be performed and the functions to be tested.

3. Conditions under which all testing will be performed, which are representative of the conditions during normal operation of the system.

4. Documentation of the owner's project requirements and the basis of design necessary to understand the installation and operation of the ESS.

5. Verification that required equipment and systems are installed in accordance with the approved plans and specifications.

6. Integrated testing for all fire and safety systems.

7. Testing for any required thermal management, ventilation or exhaust systems associated with the ESS installation.

8. Preparation and delivery of operation and maintenance documentation.

9. Training of facility operating and maintenance staff.

10. Identification and documentation of the requirements for maintaining system performance to meet the original design intent during the operation phase.

11. Identification and documentation of personnel who are qualified to service, maintain and decommission the ESS, and respond to incidents involving the ESS, including documentation that such service has been contracted for.

12. A decommissioning plan for removing the ESS from service, and from the facility in which it is located. The plan shall include details on providing a safe, orderly shutdown of energy storage and safety systems with notification to the code officials prior to the actual decommissioning of the system. The decommissioning plan shall include contingencies for removing an intact operational ESS from service, and for removing an ESS from service that has been damaged by a fire or another event.

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Exceptions:

1. Commissioning shall not be required for lead-acid and nickel-cadmium battery systems at facilities under the exclusive control of communications utilities that comply with NFPA 76 and operate at less than 50 VAC and 60 VDC. A decommissioning plan shall be provided and maintained where required by the fire code official.

2. Lead-acid and nickel-cadmium battery systems less than 50 VAC, 60 VDC that are in telecommunications facilities for installations of communications equipment under the exclusive control of communications utilities, and are located outdoors or in building spaces or walk-in units used exclusively for such installations that are in compliance with NFPA 76, shall be permitted to have a commissioning plan in compliance with recognized industry practices in lieu of complying with Section 1207.2.1.

3. Lead-acid and nickel-cadmium battery systems that are used for DC power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utilities, and are located in building spaces or walk-in units used exclusively for such installations, shall be permitted to have a commissioning plan in compliance with applicable governmental laws and regulations in lieu of developing a commissioning plan in accordance with Section 1207.2.1. (Material based on NFPA 855)

1207.2.1.1 Initial acceptance testing. During the commissioning process an ESS shall be evaluated for proper operation in accordance with the manufacturer's instructions and the commissioning plan prior to final approval.

1207.2.1.2 Commissioning report. A report describing the results of the system commissioning and including the results of the initial acceptance testing required in Section 1207.2.1.1 shall be provided to code official prior to final inspection and approval and maintained at an approved on-site location.
(Material based on NFPA 855)

☐ **1207.2.3 Decommissioning.** The code official shall be notified prior to decommissioning of an ESS. Decommissioning shall be performed in accordance with the decommissioning plan that includes the following:

1 A narrative description of the activities to be accomplished for removing the ESS from service, and from the facility in which it is located.

2. A listing of any contingencies for removing an intact operational ESS from service, and for removing an ESS from service that has been damaged by a fire or another event. (Material based on NFPA 855)

Considerations that should be included in the decommissioning plan would include but not be limited to the following:

(1) An overview of the decommissioning process developed specifically for the ESS that is to be decommissioned.
(2) Roles and responsibilities for all those involved in the decommissioning of the ESS and their removal from the site.
(3) Means and methods in the decommissioning plan submitted during the permitting process to be made available at a point in time corresponding to the decision to decommission the ESS.

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(4) Plans and specifications necessary to understand the ESS and all associated operational controls and safety systems, as built, operated, and maintained.
(5) A detailed description of each activity to be conducted during the decommissioning process and who will perform that activity and at what point in time.
(6) Procedures to be used in documenting the ESS and all associated operational controls and safety systems that have been decommissioned.
(7) Guidelines and format for a decommissioning checklist and relevant operational testing forms and necessary decommissioning logs and progress reports
(8) A description of how any changes to the surrounding areas and other systems adjacent to the ESS, including, but not limited to, structural elements, building penetrations, means of egress, and required fire detection and suppression systems, will be protected during decommissioning and confirmed as being acceptable after the system is removed.

Source: NFPA 855

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Large-Scale Fire Testing

☐ **1207.1.7 Large scale fire test.** Where required elsewhere in Section 1207, large-scale fire testing shall be conducted on a representative ESS in accordance with UL 9540A. The testing shall be conducted or witnessed and reported by an approved testing laboratory and show that a fire involving one ESS will not propagate to an adjacent ESS, and where installed within buildings, enclosed areas and walk-in units will be contained within the room, enclosed area or walk-in unit for the duration of the test. The test report shall be provided to the fire code official for review and approval in accordance with Section 104.2.2. (Material based on NFPA 855).

> **2024 IFC Commentary**: This section provides the details required if testing of new and innovative approaches to ESS are used. This is based on large-scale fire and fault condition testing with specific criteria for success and failure. The UL 9540A Test Method was specifically developed to cover this testing. Since extinguishment of a fire involving a thermal runaway in an ESS is extremely difficult, if not impossible, the code requirements are based on the concept of an ESS unit being completely consumed by fire without propagating to adjacent ESS. A large-scale fire test is essential to documenting that unit-to-unit propagation will not occur as well as generating additional data for necessary risk assessments for varied installation locations and arrangements relative to exposures. If the UL 9540A test results did not include a large-scale fire where the ESS unit is completely consumed by fire, a separate large-scale fire test must be conducted and test data accompanied by a detailed analysis is then supplied to the fire code official.

1207.5.1 Size and separation. Electrochemical ESS shall be segregated into groups not exceeding 50 kWh (180 megajoules). Each group shall be separated a minimum of 3 feet (914 mm) from other groups and from walls in the storage room or area. The storage arrangements shall comply with Chapter 10.

Exceptions: (Material based on NFPA 855)

1. Lead-acid and nickel-cadmium battery systems in facilities under the exclusive control of communications utilities and operating at less than 50 VAC and 60 VDC in accordance with NFPA 76.

2. Lead-acid and nickel-cadmium systems that are used for DC power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility, and located outdoors or in building spaces used exclusively for such installations.

3. Lead-acid battery systems in uninterruptable power supplies listed and labeled in accordance with UL 1778, utilized for standby power applications, and limited to not more than 10 percent of the floor area on the floor on which the ESS is located.

4. The fire code official is authorized to approve larger capacities or smaller separation distances based on large-scale fire testing complying with Section 1207.1.5.

1207.5.2 Maximum allowable quantities. Fire areas within rooms, areas and walk-in units containing electrochemical ESS shall not exceed the maximum allowable quantities in Table 1207.5.

Exceptions:

1. Where approved by the fire code official, rooms, areas and walk in units containing electrochemical ESS that exceed the amounts in Table 1207.5 shall be permitted based on a hazardous mitigation analysis in accordance with Section 1207.1.6 and large-scale fire testing complying with Section 1207.1.7.

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2. Lead-acid and nickel cadmium battery systems installed in facilities under the exclusive control of communications utilities, and operating at less than 50 VAC and 60 VDC in accordance with NFPA 76.

3. Dedicated use buildings in compliance with Section 1207.7.1.

1207.5.2.1 Mixed electrochemical energy systems. Where rooms, areas and walk-in units contain different types of electrochemical energy technologies, the total aggregate quantities of the systems shall be determined based on the sum of percentages of each technology type quantity divided by the maximum allowable quantity of each technology type. The sum of the percentages shall not exceed 100 percent of the maximum allowable quantity.

TABLE 1207.5—MAXIMUM ALLOWABLE QUANTITIES OF ELECTROCHEMICAL ESS

TECHNOLOGY	MAXIMUM ALLOWABLE QUANTITIES[a]
STORAGE BATTERIES	
Flow batteries[b]	600 kWh
Lead-acid, all types	Unlimited
Lithium-ion	600 kWh
Nickel-cadmium (Ni-Cd), nickel-metal hydride (NI-MH) and nickel zinc (Ni-Zn)	Unlimited
Sodium nickel chloride	600 kWh
Zinc-manganese dioxide ($Zn-MnO_2$)	Unlimited
Other battery technologies	200 kWh
CAPACITORS	
All types	20 kWh
OTHER ELECTROCHEMICAL ESS	
All types	20 kWh

For SI: 1 kilowatt hour = 3.6 megajoules.

a. For electrochemical ESS units rated in amp-hours, kWh shall equal rated voltage times the amp-hour rating divided by 1,000.

b. Shall include vanadium, zinc-bromine, polysulfide-bromide and other flowing electrolyte-type technologies.

+ Note

☐ **Deflagration Analysis**

UL 9540A Cell Level and Module Level testing and documentation is required for the generation of data necessary for deflagration analysis and explosion prevention whether the installation is in a room, cabinet or enclosure. The deflagration analysis may be included as part of the HMA.

1207.6.3 Explosion control.
Where required by Table 1207.6 or elsewhere in this code, explosion control complying with Section 911 shall be provided for rooms, areas or walk-in units containing electrochemical ESS technologies.

Exceptions: (Material based on NFPA 855)

1. Where approved, explosion control is permitted to be waived by the fire code official based on large-scale fire testing complying with Section 1207.1.7 that demonstrates that flammable gases are not liberated from electrochemical ESS cells or modules.

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2. Where approved, explosion control is permitted to be waived by the fire code official based on documentation provided in accordance with Section 104.2.2 that demonstrates that the electrochemical ESS technology to be used does not have the potential to release flammable gas concentrations in excess of 25 percent of the LFL anywhere in the room, area, walk-in unit or structure under thermal runaway or other fault conditions.

3. Where approved, ESS cabinets that have no debris, shrapnel or enclosure pieces ejected during large-scale fire testing complying with Section 1207.1.5 shall be permitted in lieu of providing explosion control complying with Section 911.

4. Explosion control is not required for lead-acid and nickel-cadmium battery systems less than 50 VAC, 60 VDC in telecommunication facilities under the exclusive control of communications utilities located in building spaces or walk-in units used exclusively for such installations.

5. Explosion control is not required for lead-acid and nickel-cadmium systems used for DC power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility, located in building spaces or walk-in units used exclusively for such installations.

6. Explosion control is not required for lead-acid battery systems in uninterruptable power supplies listed and labeled in accordance with UL 1778, utilized for standby power applications, and housed in a single cabinet in a single fire area in buildings or walk-in units.

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TABLE 911.1—EXPLOSION CONTROL REQUIREMENTS[f]

MATERIAL	CLASS	EXPLOSION CONTROL METHODS	
		Barricade construction	Explosion (deflagration) venting or explosion (deflagration) prevention systems
Hazard Category			
Combustible dusts[a]	—	Not required	Required
Cryogenic fluids	Flammable	Not required	Required
Explosives	Division 1.1	Required	Not required
	Division 1.2	Required	Not required
	Division 1.3	Not required	Required
	Division 1.4[i]	Not required	Required
	Division 1.5	Required	Not required
	Division 1.6	Required	Not required
Flammable gas	Gaseous	Not required	Required[h]
	Liquefied	Not required	Required[h]
Flammable liquids	IA[b]	Not required	Required
	IB[c]	Not required	Required
Organic peroxides	Unclassified detonable	Required	Not permitted
	I	Required	Not permitted
Oxidizer liquids and solids	4	Required	Not permitted
Pyrophoric	Gases	Not required	Required
Unstable (reactive)	4	Required	Not permitted
	3 detonable	Required	Not permitted
	3 nondetonable	Not required	Required
Water-reactive liquids and solids	3	Not required	Required
	2[e]	Not required	Required
Special Uses			
Acetylene generator rooms	—	Not required	Required
Electrochemical energy storage systems[g]	—	Not required	Required
Energy storage systems[g]	—	Not required	Required
Grain processing	—	Not required	Required
Liquefied petroleum gas distribution facilities	—	Not required	Required
Where explosion hazards exist[d]	Detonation	Required	Not permitted
	Deflagration	Not required	Required

For SI: 1 inch per second = 25.4 mm/s.

a. Combustible dusts where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 104.2.2. See definition of "Combustible dust" in Chapter 2.
b. Storage or use.
c. In open use or dispensing.
d. Rooms containing dispensing and use of hazardous materials where an explosive environment can occur because of the characteristics or nature of the hazardous materials or as a result of the dispensing or use process.
e. A method of explosion control shall be provided where Class 2 water-reactive materials can form potentially explosive mixtures.
f. Explosion venting is not required for Group H-5 Fabrication Areas complying with Chapter 27 and the *California Building Code*.
g. Where explosion control is required in Section 1207.6.3.
h. Not required for Category 1B Flammable Gases having a burning velocity not exceeding 3.9 inches per second.
i. Does not apply to consumer fireworks, 1.4G.

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TABLE 1207.6—ELECTROCHEMICAL ESS TECHNOLOGY-SPECIFIC REQUIREMENTS

COMPLIANCE REQUIRED[b]		BATTERY TECHNOLOGY							
Feature	Section	Lead-acid	Nickel cadmium (Ni-Cd), nickel-metal hydride (Ni-MH) and nickel zinc (Ni-Zn)	Zinc-manganese dioxide ($Zn-MnO_2$)	Lithium-ion	Flow	Sodium nickel chloride	OTHER ESS AND BATTERY TECHNOLOGIES[b]	CAPACITOR ESS[b]
Exhaust ventilation	1207.6.1	Yes	Yes	Yes	No	Yes	No	Yes	Yes
Explosion control	1207.6.3	Yes[a]	Yes[a]	Yes	Yes	No	Yes	Yes	Yes
Safety caps	1207.6.4	Yes	Yes	No	No	No	No	Yes	Yes
Spill control and neutralization	1207.6.2	Yes[c]	Yes[c]	Yes[f]	No	Yes	No	Yes	Yes
Thermal runaway	1207.6.5	Yes[d]	Yes	Yes[e]	Yes[e]	No	Yes	Yes[e]	Yes

a. Not required for lead-acid and nickel-cadmium batteries at facilities under the exclusive control of communications utilities that comply with NFPA 76 and operate at less than 50 VAC and 60 VDC.
b. Protection shall be provided unless documentation acceptable to the fire code official is provided in accordance with Section 104.2.2 that provides justification why the protection is not necessary based on the technology used.
c. Applicable to vented-type (i.e., flooded) nickel-cadmium and lead-acid batteries.
d. Not required for vented-type (i.e., flooded) batteries.
e. The thermal runaway protection is permitted to be part of a battery management system that has been evaluated with the battery as part of the evaluation to UL 1973.
f. Not required for batteries with jelled electrolyte.

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Operation and maintenance (submission prior to final approval)

☐ **1207.2.2 Operation and maintenance.**-An operating and maintenance manual shall be provided to both the ESS owner or their authorized agent and the ESS operator before the ESS is put into operation and shall include the following:

1. Manufacturer's operation manuals and maintenance manuals for the entire ESS or for each component of the system requiring maintenance, that clearly identify the required routine maintenance actions.

2. Name, address and phone number of a service agency that has been contracted to service the ESS and its associated safety systems.

3. Maintenance and calibration information, including wiring diagrams, control drawings, schematics, system programming instructions and control sequence descriptions, for all energy storage control systems.

4. Desired or field-determined control set points that are permanently recorded on control drawings at control devices or, for digital control systems, in system programming instructions.

5. A schedule for inspecting and recalibrating all ESS controls.

6. A service record log form that lists the schedule for all required servicing and maintenance actions and space for logging such actions that are completed over time and retained on site.

The ESS shall be operated and maintained in accordance with the manual and a copy of the manual shall be retained at an approved onsite location.

NFPA 855

7.1.2 The operation and maintenance documentation shall include the following:

(1) Procedures for the safe startup of the ESS system and associated equipment

(2) Procedures for inspection and testing of associated alarms, interlocks, and controls

(3) Procedures for maintenance and operation of the following, where applicable:

(a) Energy storage management systems (ESMS)

(b) Fire protection equipment and systems

(c) Spill control and neutralization systems

(d) Exhaust and ventilation equipment and systems

(e) Gas detection systems

(f) Other required safety equipment and systems

(4) Response considerations similar to a safety data sheet (SDS) that address response safety concerns and extinguishment where an SDS is not required

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(5)* An instruction that equipment or system changes to the installation are required to be recorded by updating any engineering documentation

1207.2.2.1 Ongoing inspection and testing. Systems that monitor and protect the ESS installation shall be inspected and tested in accordance with the manufacturer's instructions and the operating and maintenance manual. Inspection and testing records shall be maintained in the operation and maintenance manual.

NFPA 855

7.2 * System Maintenance. The ESS shall be maintained in accordance with the system manufacturer's instructions.

7.2.1 The maintenance documentation shall include a detailed maintenance schedule covering all affected equipment and the activities to be performed.

7.2.2 Maintenance shall be performed by qualified individuals.

7.2.3 Maintenance documentation indicating the maintenance action taken, the date of the action, who implemented the action, and the results associated with the action shall be maintained as required by Section 6.3.

7.2.4 Maintenance documentation shall record information on any repair, renewal, or renovation made to the ESS.

7.2.5 Training. Training shall be provided to all those responsible for system operation and maintenance.

7.2.5.1 Training on system operation and maintenance shall be provided by the system owner or their designated agent.

7.2.5.2 After recommissioning the system, training on any changes to the operation and maintenance documentation shall be provided.

7.2.5.3 Training records of site operations and maintenance personnel shall be retained and accessible to the AHJ, indicating the training taken, the name(s) of those taking the training, and the training date.

7.3 System Testing. 7.3.1 System testing shall be performed when required by the operating instructions or maintenance documentation in accordance with testing procedures provided by the ESS manufacturer.

7.3.2 A record of all testing shall be maintained in accordance with the requirements in Section 6.3.

7.3.2.1 Testing records shall be permitted to be made available electronically.

☐ **105.5.14 Energy storage systems.** An operational permit is required for stationary and mobile energy storage systems regulated by Section 1207.

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☐ Emergency Action Plan

+ Note: An Emergency action plan will be required in all cases both during construction and operation after final approval. Fire remediation may be written into that plan.

1207.1.8 Fire remediation. Where a fire or other event has damaged the ESS and ignition or re-ignition of the ESS is possible, the system owner, agent, or lessee shall take the following actions, at their expense, to mitigate the hazard or remove damaged equipment from the premises to a safe location.

1207.1.8.1 Fire mitigation personnel. Where, in the opinion of the fire code official, it is essential for public safety that trained personnel be on site to respond to possible ignition or re-ignition of a damaged ESS, the system owner, agent or lessee shall dispatch within 15 minutes one or more fire mitigation personnel to the premise, as required and approved, at their expense. These personnel shall remain on duty continuously after the fire department leaves the premise until the damaged energy storage equipment is removed from the premises, or earlier if the fire code official indicates the public safety hazard has been abated. (Material based on NFPA 855 2023 Ed.)

1207.1.8.2 Duties. On-duty fire mitigation personnel shall have the following responsibilities:

1. Keep diligent watch for fires, obstructions to means of egress and other hazards.

2. Immediately contact the fire department if their assistance is needed to mitigate any hazards or extinguish fires.

3. Take prompt measures for remediation of hazards in accordance with the decommissioning plan in Section 1207.2.3.

4. Take prompt measures to assist in the evacuation of the public from the structures. (Material based on NFPA 855 2023 Ed.)

Considerations that should be included in the emergency action plan would include but not be limited to the following:

4.3 Emergency Planning and Training.

4.3.1 * General.
For ESS installations that exceed the maximum stored energy limits of Table 9.4.1, emergency planning and training shall be provided by the owner of the ESS or their authorized representative so that ESS facility operations and maintenance personnel and emergency responders can address foreseeable hazards associated with the on-site systems.

4.3.2 Facility Staff Planning and Training.
For ESS installations that exceed the maximum stored energy limits of Table 9.4.1, an emergency operations plan and associated training shall be established, maintained, and conducted by ESS facility operations and maintenance personnel.

4.3.2.1 Emergency Operations Plan.
4.3.2.1.1
An emergency operations plan shall be readily available for use by facility operations and maintenance personnel.

4.3.2.1.2

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For normally occupied facilities, the emergency operations plan shall be on site.

4.3.2.1.3
The plan shall be updated when conditions that affect the response considerations and procedures change.

4.3.2.1.4
The emergency operations plan shall include the following:

(1) Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions

(2) Procedures for inspection and testing of associated alarms, interlocks, and controls

(3)* Procedures to be followed in response to notifications of system alarms or out-of-range conditions that could signify potentially dangerous conditions, including shutting down equipment, summoning service or repair personnel, and providing agreed-upon notification to fire department personnel, if required

(4)* Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions

(5) Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required

(6) Procedures for dealing with ESS equipment damaged in a fire or other emergency event, including contact information for personnel qualified to safely remove damaged ESS equipment from the facility

(7) Other procedures as determined necessary by the AHJ to provide for the safety of occupants and emergency responders

(8) Procedures and schedules for conducting drills of these procedures

4.3.2.1.5
The emergency operations plan in 4.3.2.1 shall not be required for electric utility facilities under the exclusive control of the electric utility located outdoors or in building spaces used exclusively for such installations.

4.3.2.2 Facility Staff Training.
4.3.2.2.1
Personnel responsible for the operation, maintenance, repair, servicing, and response of the ESS shall be trained in the procedures included in the emergency operations plan in 4.3.2.1.

4.3.2.2.2
Refresher training shall be conducted at least annually and records of such training retained in an approved manner.

Source: NFPA 855

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☐ Listings

1207.3 Equipment. ESS equipment shall be in accordance with Sections 1207.3.1 through 1207.3.9.

1207.3.1 Energy storage system listings. ESS shall be listed in accordance with UL 9540.

Exceptions:

1. Lead-acid and nickel-cadmium battery systems less than 50 VAC, 60 VDC in telecommunications facilities for installations of communications equipment under the exclusive control of communications utilities located outdoors or in building spaces used exclusively for such installations that are in compliance with NFPA 76.

2. Lead-acid and nickel-cadmium battery systems that are used for DC power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility, and located outdoors or in building spaces used exclusively for such installations.

3. Lead-acid battery systems in uninterruptable power supplies listed and labeled in accordance with UL 1778 and utilized for standby power applications.

(Material based on NFPA 855)

1207.3.2 Equipment listing. Chargers, inverters and energy storage management systems shall be covered as part of the UL 9540 listing or shall be listed separately.

1207.3.3 Utility interactive systems. Inverters shall be listed and labeled in accordance with UL 1741. Only inverters listed and labeled for utility interactive system use and identified as interactive shall be allowed to operate in parallel with the electric utility power system to supply power to common loads.

1207.3.4 Energy storage management system. Where required by the ESS listing, an approved energy storage management system that monitors and balances cell voltages, currents and temperatures within the manufacturer's specifications shall be provided. The system shall disconnect electrical connections to the ESS or otherwise place it in a safe condition if potentially hazardous temperatures or other conditions such as short circuits, over voltage or under voltage are detected. (Material based on NFPA 855 2023 Ed.)

1207.3.5 Enclosures. Enclosures of ESS shall be of noncombustible construction. (Material based on NFPA 855)

NFPA 70

ARTICLE 706 Energy Storage Systems
Part I. General

706.1 Scope.
This article applies to all energy storage systems (ESS) having a capacity greater than 3.6 MJ (1 kWh) that may be stand-alone or interactive with other electric power production sources. These systems are primarily intended to store and provide energy during normal operating conditions.

Informational Note No. 1: See Article 480 for installations that meet the definition of stationary standby batteries..

Informational Note No. 2: For batteries rated in ampere hours, kWh is equal to the nominal rated voltage times ampere-hour rating divided by 1000.

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Informational Note No. 3: The following standards are frequently referenced for the installation of ESSs:

(1) NFPA 1-2021, Fire Code
(2) NFPA 111-2019, Standard on Stored Electrical Energy Emergency and Standby Power Systems
(3) NECA 416-2016, Recommended Practice for Installing Energy Storage Systems (ESS)
(4) UL 810A, Electrochemical Capacitors
(5) NFPA 855-2020, 2023 Standard for the Installation of Stationary Energy Storage Systems
(6) UL 1973, Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power, and Light Electric Rail (LER) Applications
(7) UL 1989, Standard for Standby Batteries
(8) UL 9540, Standard for Safety Energy Storage Systems and Equipment
(9) UL Subject 2436, Spill Containment For Stationary Lead Acid Battery Systems

706.5 Listing.
Energy storage systems shall be listed.

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Fire Protection Systems Generally

901.2 Construction documents. The fire code official shall have the authority to require construction documents and calculations for all fire protection and life safety systems and to require permits be issued for the installation, rehabilitation or modification of any fire protection and life safety systems. Construction documents for fire protection and life safety systems shall be submitted for review and approval prior to system installation.

☐ Automatic Sprinkler Systems (*Requires a C16 License*)

903.3.1.1 NFPA 13 sprinkler systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 as amended in Chapter 80 except as provided in Sections 903.3.1.1.1 and 903.3.1.1.3.-**Permit applied through the Fire Prevention Office**
[*See also NFPA 13-25 for plan submittal details*]

☐ Automatic fire-extinguishing systems.

105.6.1 A construction permit is required for installation of or modification to an automatic fire extinguishing system (FPS), other than an automatic sprinkler system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit-**Permit applied through Fire Prevention Office**

105.6.1.1.1 Fire Alarm Systems (*Requires a C10 License*)

907.1.1 Construction documents. Construction documents for fire alarm systems shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code, the California Building Code and relevant laws, ordinances, rules and regulations, as determined by the fire code official.

907.1.2 Fire alarm shop drawings. Shop drawings for fire alarm systems shall be prepared in accordance with NFPA 72 and submitted for review and approval prior to system installation-**Permit applied through the Fire Prevention Office. [***See also NFPA 72-25 for plan submittal details**]*

Exception: Other symbols are allowed where approved by the enforcing agency.

907.1.3 Equipment.
Systems and components shall be California State Fire Marshal listed and approved in accordance with California Code of Regulations, Title 19, Division 1 for the purpose for which they are installed..

☐ Gas Detection Systems (*Requires a C10 License*)

916.2.1 Construction documents. Documentation of the gas detection system design and equipment to be used that demonstrates compliance with the requirements of this code shall be provided with the application for permit-**Permit applied through the Fire Prevention Office.**
[See also NFPA 72-25 Section 17.10 Gas Detection]

☐ FIRE PROTECTION WATER SUPPLIES (*Requires a C16 License*)

507.1 Required water supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

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507.2 Type of water supply. A water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

507.2.1 Private fire service mains. Private fire service mains and appurtenances shall be installed in accordance with NFPA 24 as amended in Chapter 80-**Permit applied through the Fire Prevention Office**

507.2.2 Water tanks. Water tanks for private fire protection shall be installed in accordance with NFPA 22-**Permit applied through the Fire Prevention Office or the Building Department.**

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TABLE 1207.7—INDOOR ESS INSTALLATIONS

COMPLIANCE REQUIRED		DEDICATED-USE BUILDINGS[a]	NONDEDICATED-USE BUILDINGS[b]
Feature	Section		
Dwelling units and sleeping units	1207.7.3	NA	Yes
COMPLIANCE REQUIRED		**DEDICATED-USE BUILDINGS[a]**	**NONDEDICATED-USE BUILDINGS[b]**
Feature	**Section**		
Elevation	1207.5.3	Yes	Yes
Fire suppression systems	1207.5.5	Yes[c]	Yes
Fire-resistance-rated separations	1207.7.4	Yes	Yes
General installation requirements	1207.4	Yes	Yes
Maximum allowable quantities	1207.5.2	No	Yes
Size and separation	1207.5.1	Yes	Yes
Smoke and automatic fire detection[e]	1207.5.4	Yes[d]	Yes
Technology specific protection	1207.6	Yes	Yes

NA = Not Allowed.

a. See Section 1207.7.1.
b. See Section 1207.7.2.
c. Where approved by the fire code official, fire suppression systems are permitted to be omitted in dedicated-use buildings located more than 100 feet (30.5 m) from buildings, lot lines, public ways, stored combustible materials, hazardous materials, high-piled stock and other exposure hazards.
d. Where approved by the fire code official, alarm signals are not required to be transmitted to a central station, proprietary or remote station service in accordance with NFPA 72, or a constantly attended location where local fire alarm annunciation is provided and trained personnel are always present.
e. Lead-acid and nickel-cadmium battery systems installed in Group U buildings and structures less than 1,500 square feet (139 m^2) under the exclusive control of communications utilities, and operating at less than 50 VAC and 60 VDC in accordance with NFPA 76, are not required to have an approved automatic smoke or fire detection system.

TABLE 1207.8—OUTDOOR ESS INSTALLATIONS[a]

COMPLIANCE REQUIRED		REMOTE INSTALLATIONS[a]	INSTALLATIONS NEAR EXPOSURES[b]
Feature	Section		
All ESS installations	1207.4	Yes	Yes
Clearance to exposures	1207.8.3	Yes	Yes
Fire suppression systems	1207.5.5	Yes[c]	Yes
Maximum allowable quantities	1207.5.2	No	Yes
Maximum enclosure size	1207.5.6	Yes	Yes
Means of egress separation	1207.5.8	Yes	Yes
Size and separation	1207.5.1	No	Yes[d]
Smoke and automatic fire detection	1207.5.4	Yes	Yes
Technology-specific protection	1207.6	Yes	Yes
Vegetation control	1207.5.7	Yes	Yes

a. See Section 1207.8.1.
b. See Section 1207.8.2.
c. Where approved by the fire code official, fire suppression systems are permitted to be omitted.
d. In outdoor walk-in units, spacing is not required between ESS units and the walls of the enclosure.

☐ **1207.8 Outdoor installations.** Outdoor installations shall be in accordance with Sections 1207.8.1 through 1207.8.3. Exterior wall installations for individual ESS units not exceeding 20 KWh shall be in accordance with Section 1207.8.4. (Material based on NFPA 855)

1207.8.1 Remote outdoor installations. For the purpose of Table 1207.8, remote outdoor installations include ESS located more than 100 feet (30.5 M) from buildings, lot lines, public ways, stored combustible materials, hazardous materials, high piled stock and other exposure hazards. (Material based on NFPA 855)

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1207.8.2 Installations near exposures. For the purpose of Table 1207.8, installations near exposures include all outdoor ESS installations that do not comply with Section 1207.8.1 remote outdoor location requirements. (Material based on NFPA 855)

1207.8.3 Clearance to exposures. ESS located outdoors shall be separated by a minimum ten feet (3048 mm) from the following exposures:

1. Lot lines
2. Public ways
3. Buildings
4. Stored combustible materials
5. Hazardous materials
6. High-piled stock
7. Other exposure hazards

Exceptions: (Material based on NFPA 855)

1. Clearances are permitted to be reduced to 3 feet (914 mm) where a 1 hour free standing fire barrier, suitable for exterior use, and extending 5 feet (1.5 m) above and extending 5 feet (1.5 m) beyond the physical boundary of the ESS installation is provided to protect the exposure.

2. Clearances to buildings are permitted to be reduced to 3 feet (914 mm) where noncombustible exterior walls with no openings or combustible overhangs are provided on the wall adjacent to the ESS and the fire-resistance rating of the exterior wall is a minimum of 2 hours.

3. Clearances to buildings are permitted to be reduced to 3 feet (914.4 mm) where a weatherproof enclosure constructed of noncombustible materials is provided over the ESS, and it has been demonstrated that a fire within the enclosure will not ignite combustible materials outside the enclosure based on large scale fire testing complying with Section 1207.1.7.

☐ **1207.8.4 Exterior wall installations.** ESS shall be permitted to be installed outdoors on exterior walls of buildings when all the following conditions are met.

1. The maximum energy capacity of individual ESS units shall not exceed 20 kWh.
2. The ESS shall comply with applicable requirements in Section 1207.
3. The ESS shall be installed in accordance with the manufacturer's instructions and their listing.
4. Individual ESS units shall be separated from each other by at least three feet (914 mm).
5. The ESS shall be separated from doors, windows, operable openings into buildings, or HVAC inlets by at least five feet (1524 mm).

Exception: Where approved smaller separation distances in items 4 and 5 shall be permitted based on large scale fire testing complying with Section 1207.1.7. (Material based on NFPA 855)

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TABLE 1207.9—SPECIAL ESS INSTALLATIONS

COMPLIANCE REQUIRED		ROOFTOPS[a]	OPEN PARKING GARAGES[b]
Feature	Section		
All ESS installations	1207.4	Yes	Yes
Clearance to exposures	1207.9.3	Yes	Yes
Fire suppression systems	1207.9.4	Yes	Yes
Maximum allowable quantities	1207.5.2	Yes	Yes
Maximum enclosure size	1207.5.6	Yes	Yes
Means of egress separation	1207.5.8	Yes	Yes
Open parking garage installations	1207.9.6	No	Yes
Rooftop installations	1207.9.5	Yes	No
Size and separation	1207.5.1	Yes	Yes
Smoke and automatic fire detection	1207.5.4	Yes	Yes
Technology-specific protection	1207.6	Yes	Yes

a. See Section 1207.9.1.
b. See Section 1207.9.2.

1207.9 Special installations. Rooftop and open parking garage ESS installations shall comply with Sections 1207.9.1 through 1207.9.6.

☐ **1207.9.1 Rooftop installations.** For the purpose of Table 1207.9, rooftop ESS installations are those located on the roofs of buildings. (Material based on NFPA 855)

☐ **1207.9.2 Open parking garage installations.** For the purpose of Table 1207.9, open parking garage ESS installations are those located in a structure or portion of a structure that complies with Section 406.5 of the California Building Code. (Material based on NFPA 855)

1207.9.3 Clearance to exposures. ESS located on rooftops and in open parking garages shall be separated by a minimum ten feet (3048 mm) from the following exposures:

1. Buildings, except the building on which rooftop ESS is mounted
2. Any portion of the building on which a rooftop system is mounted that is elevated above the rooftop on which the system is installed
3. Lot lines
4. Public ways
5. Stored combustible materials
6. Locations where motor vehicles can be parked
7. Hazardous materials
8. Other exposure hazards

Exceptions:

1. Clearances are permitted to be reduced to 3 feet (914 mm) where a 1 hour free standing fire barrier, suitable for exterior use, and extending 5 feet (1.5 m) above and extending 5 feet (1.5 m) beyond the physical boundary of the ESS installation is provided to protect the exposure.

2. Clearances are permitted to be reduced to 3 feet (914.4 mm) where a weatherproof enclosure constructed of noncombustible materials is provided over the ESS and it has been demonstrated that a fire within the enclosure will not ignite combustible materials

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outside the enclosure based on large scale fire testing complying with Section 1207.1.7. (Material based on NFPA 855 2023 Ed.)

TABLE 1207.10—MOBILE ENERGY STORAGE SYSTEMS (ESS)

COMPLIANCE REQUIRED		DEPLOYMENT[a]
Feature	Section	
All ESS installations	1207.4	Yes[b]
Fire suppression systems	1207.5.5	Yes[c]
Maximum allowable quantities	1207.5.2	Yes
Maximum enclosure size	1207.5.6	Yes
Means of egress separation	1207.5.8	Yes
Size and separation	1207.5.1	Yes[d]
Smoke and automatic fire detection	1207.5.4	Yes[e]
Technology-specific protection	1207.6	Yes
Vegetation control	1207.5.7	Yes

a. See Section 1207.10.2.
b. Mobile operations on wheeled vehicles and trailers shall not be required to comply with Section 1207.4.4 seismic and structural load requirements.
c. Fire suppression system connections to the water supply shall be permitted to use approved temporary connections.
d. In walk-in units, spacing is not required between ESS units and the walls of the enclosure.
e. Alarm signals are not required to be transmitted to an approved location for mobile ESS deployed 30 days or less.

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Fire Protection Systems Documentation Generally (FPS)

901.2 Construction documents. The fire code official shall have the authority to require construction documents and calculations for all fire protection and life safety systems and to require permits be issued for the installation, rehabilitation or modification of any fire protection and life safety systems. Construction documents for fire protection and life safety systems shall be submitted for review and approval prior to system installation-**Permit applied through Fire Prevention Office.**

☐ Automatic Sprinkler Systems (*Requires a C16 License*) (FSS)

903.3.1.1 NFPA 13 sprinkler systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 as amended in Chapter 80 except as provided in Sections 903.3.1.1.1 and 903.3.1.1.3-**Permit applied through Fire Prevention Office**
[*See also NFPA 13-25 for plan submittal details*]

☐ Fire Alarm Systems (*Requires a C10 License*) (FA)

907.1.1 Construction documents. Construction documents for fire alarm systems shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code, the California Building Code and relevant laws, ordinances, rules and regulations, as determined by the fire code official-**Permit applied through Fire Prevention Office.**

907.1.2 Fire alarm shop drawings. Shop drawings for fire alarm systems shall be prepared in accordance with NFPA 72 and submitted for review and approval prior to system installation.
[See also NFPA 72-25 for plan submittal details]

Exception: Other symbols are allowed where approved by the enforcing agency.

907.1.3 Equipment.
Systems and components shall be California State Fire Marshal listed and approved in accordance with California Code of Regulations, Title 19, Division 1 for the purpose for which they are installed..

☐ Gas Detection Systems (*Requires a C10 License*) (GAS)

916.2.1 Construction documents. Documentation of the gas detection system design and equipment to be used that demonstrates compliance with the requirements of this code shall be provided with the application for permit-**Permit applied through Fire Prevention Office**
[See also NFPA 72-25 Section 17.10 Gas Detection]

☐ FIRE PROTECTION WATER SUPPLIES (*Requires a C16 License*)

507.1 Required water supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

507.2 Type of water supply. A water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

507.2.1 Private fire service mains. Private fire service mains and appurtenances shall be installed in accordance with NFPA 24 as amended in Chapter 80-**Permit applied through Fire Prevention Office.**

507.2.2 Water tanks. Water tanks for private fire protection shall be installed in accordance with NFPA 22-**Permit applied through Fire Prevention Office or Building Department.**

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Fire Protection Guidance

SECTION 901
GENERAL

901.1 Scope. The provisions of this chapter shall specify where fire protection and life safety systems are required and shall apply to the design, installation, inspection, operation, testing and maintenance of all fire protection and life safety systems.

901.2.1 Statement of compliance. Before requesting final approval of the installation, where required by the fire code official, the installing contractor shall furnish a written statement to the fire code official that the subject fire protection system has been installed in accordance with approved plans and has been tested in accordance with the manufacturer's specifications and the appropriate installation standard. Any deviations from the design standards shall be noted and copies of the approvals for such deviations shall be attached to the written statement.

901.5. Administration of installation acceptance testing. Fire protection and life safety systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified before any required acceptance testing.

> **901.5.1 Occupancy**. It shall be unlawful to occupy any portion of a building or structure until the required fire protection and life safety systems have been tested and approved.
>
> **901.6.2 Integrated testing**. Where two or more fire protection or life safety systems are interconnected, the intended response of subordinate fire protection and life safety systems shall be verified when required testing of the initiating system is conducted. In addition, integrated testing shall be performed in accordance with Sections 901.6.2.1 and 901.6.2.2.

SECTION 903
AUTOMATIC SPRINKLER SYSTEMS

903.1 General. Automatic sprinkler systems shall comply with this section.

> **903.1.1 Alternative protection**. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted instead of automatic sprinkler protection where recognized by the applicable standard and approved by the fire code official.

903.3 Installation requirements. Automatic sprinkler systems shall be designed and installed in accordance with Sections 903.3.1 through 903.3.8.

> **903.3.1 Standards**. Sprinkler systems shall be designed and installed in accordance with Section 903.3.1.1, unless otherwise permitted by Sections 903.3.1.2 and 903.3.1.3 and other chapters of this code, as applicable.
>
> **903.3.1.1 NFPA 13 sprinkler systems.** Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 as amended in Chapter 80 except as provided in Sections 903.3.1.1.1 and 903.3.1.1.3.

903.4 Sprinkler system supervision and alarms. Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

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Exceptions:

1 .Automatic sprinkler systems protecting one- and two-family dwellings.

2. Limited area sprinkler systems in accordance with Section 903.3.8, provided that backflow prevention device test valves located in limited area sprinkler system supply piping shall be locked in the open position unless supplying an occupancy required to be equipped with a fire alarm system, in which case the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.

3. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.

4. Jockey pump control valves that are sealed or locked in the open position.

5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.

6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.

7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

8. Underground key or hub gate valves in roadway boxes.

903.4.2 Monitoring. Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an approved supervising station or, where approved by the fire code official, shall sound an audible signal at a constantly attended location.

903.4.2 Alarms. An approved audible and visual sprinkler waterflow alarm device, located on the exterior of the building in an approved location, shall be connected to each automatic sprinkler system. Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a waterflow switch is required by Section 903.4.1 to be electrically supervised, such sprinkler waterflow alarm devices shall be powered by a fire alarm control unit or, where provided, a fire alarm system. Where a fire alarm system is provided, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

Exception: Automatic sprinkler systems protecting one- and two-family dwellings..

SECTION 904
ALTERNATIVE AUTOMATIC
FIRE-EXTINGUISHING SYSTEMS

904.1 General. Automatic fire-extinguishing systems, other than automatic sprinkler systems, shall be designed, installed, inspected, tested and maintained in accordance with the provisions of this section and the applicable referenced standards.

904.2 Where permitted. Automatic fire-extinguishing systems installed as an alternative to the required automatic sprinkler systems of Section 903 shall be approved by the fire code official.

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904.3 Installation. Automatic fire-extinguishing systems shall be installed in accordance with this section.

904.3.1 Electrical wiring. Electrical wiring shall be in accordance with the California Electrical Code.

904.3.2 Actuation. Automatic fire-extinguishing systems shall be automatically actuated and provided with a manual means of actuation in accordance with Section 904.14.1. Where more than one hazard could be simultaneously involved in fire due to their proximity, all hazards shall be protected by a single system designed to protect all hazards that could become involved.

> **Exception:** Multiple systems shall be permitted to be installed if they are designed to operate simultaneously.

904.3.3 System interlocking. Automatic equipment interlocks with fuel shutoffs, ventilation controls, door closers, window shutters, conveyor openings, smoke and heat vents and other features necessary for proper operation of the fire-extinguishing system shall be provided as required by the design and installation standard utilized for the hazard.

904.3.4 Alarms and warning signs. Where alarms are required to indicate the operation of automatic fire-extinguishing systems, distinctive audible, visible alarms and warning signs shall be provided to warn of pending agent discharge. Where exposure to automatic-extinguishing agents poses a hazard to persons and a delay is required to ensure the evacuation of occupants before agent discharge, a separate warning signal shall be provided to alert occupants once agent discharge has begun. Audible signals shall be in accordance with Section 907.5.2.

904.3.5 Monitoring. Where a building fire alarm system is installed, automatic fire-extinguishing systems shall be monitored by the building fire alarm system in accordance with NFPA 72.

904.4 Inspection and testing. Automatic fire-extinguishing systems shall be inspected and tested in accordance with the provisions of this section prior to acceptance.

904.4.1 Inspection. Prior to conducting final acceptance tests, all of the following items shall be inspected:

1. Hazard specification for consistency with design hazard.
2. Type, location and spacing of automatic- and manual-initiating devices.
3. Size, placement and position of nozzles or discharge orifices.
4. Location and identification of audible and visible alarm devices.
5. Identification of devices with proper designations.
6. Operating instructions.

904.4.2 Alarm testing. Notification appliances, connections to fire alarm systems and connections to approved supervising stations shall be tested in accordance with this section and Section 907 to verify proper operation.

> **904.4.2.1 Audible and visible signals**. The audibility and visibility of notification appliances signaling agent discharge or system operation, where required, shall be verified.

> **904.4.3 Monitor testing**. Connections to protected premises and supervising station fire alarm systems shall be tested to verify proper identification and retransmission of alarms from automatic fire-extinguishing systems.

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SECTION 907
FIRE ALARM AND DETECTION SYSTEMS

907.1 General. This section covers the application, installation, performance and maintenance of fire alarm systems and their components in new and existing buildings and structures. The requirements of Section 907.2 are applicable to new buildings and structures. The requirements of Section 907.9 are applicable to existing buildings and structures.

907.1.3 Equipment. Systems and components shall be California State Fire Marshal listed and approved in accordance with California Code of Regulations, Title 19, Division 1 for the purpose for which they are installed.

907.2.23 Energy storage systems. An automatic smoke detection system or radiant-energy detection system shall be installed in rooms, areas and walk-in units containing energy storage systems as required in Section 1207.5.4.

907.4 Initiating devices. Where a fire alarm system is required by another section of this code, occupant notification in accordance with Section 907.5 shall be initiated by one or more of the following. Initiating devices shall be installed in accordance with Sections 907.4.1 through 907.4.3.1.

1. Manual fire alarm boxes.
2. Automatic fire detectors.
3. Automatic sprinkler system waterflow devices.
4. Automatic fire-extinguishing systems.

907.4.1 Protection of fire alarm control unit. In areas that are not continuously occupied, a single smoke detector shall be provided at the location of each fire alarm control unit, notification appliance circuit power extenders and supervising station transmitting equipment.

Exception: Where ambient conditions prohibit installation of smoke detector, a heat detector shall be permitted.

907.5 Occupant notification systems. Occupant notification by fire alarms shall be in accordance with Sections 907.5.1 through 907.5.2.5. Occupant notification by smoke alarms in Group R-1 and R-2 occupancies shall comply with Section 907.5.2.1.3.2.

907.5.1 Alarm activation and annunciation. Upon activation, fire alarm systems shall initiate occupant notification and shall annunciate at the fire alarm control unit, or where allowed elsewhere by Section 907, at a constantly attended location.

907.5.2 Alarm notification appliances. Alarm notification appliances shall be provided and shall be listed for their purpose.

907.6 Installation and monitoring. A fire alarm system shall be installed and monitored in accordance with Sections 907.6.1 through 907.6.6.4 and NFPA 72.

907.6.1 Wiring. Wiring shall comply with the requirements of the California Electrical Code and NFPA 72. Wireless protection systems utilizing radio-frequency transmitting devices shall comply with the special requirements for supervision of low-power wireless systems in NFPA 72.

907.6.2 Power supply. The primary and secondary power supply for the fire alarm system shall be provided in accordance with NFPA 72.

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907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate.

907.6.3.1 Annunciation. The initiating device status shall be annunciated at an approved on-site location.

NFPA 72
10.18.3 * Annunciator Access and Location.
10.18.3.1
All required annunciation means shall be readily accessible to responding personnel.

10.18.3.2
All required annunciation means shall be located as required by the authority having jurisdiction to facilitate an efficient response to the situation.

10.18.6 * Emergency Services Interfaces.
Where required by the enforcing authority; governing laws, codes, or standards; or other parts of this Code, annunciators, information display systems, and controls for portions of a system provided for use by emergency service personnel shall be designed, arranged, and located in accordance with the requirements of the organizations intended to use the equipment.

A.10.18.6
Emergency Services Interfaces. Annunciators, information display systems, and controls for portions of a system provided for use by emergency service personnel should be designed, arranged, and located in accordance with the needs of the organizations intended to use the equipment.

907.6.5 Access. Access shall be provided to each fire alarm device and notification appliance for periodic inspection, maintenance and testing.

907.6.6 Monitoring. Fire alarm systems required by this chapter or by the California Building Code shall be monitored by an approved supervising station in accordance with NFPA 72 and this section.

907.7 Acceptance tests and completion. Upon completion of the installation, the fire alarm system and all fire alarm components shall be tested in accordance with NFPA 72.

907.7.2 Record of completion. A record of completion in accordance with NFPA 72 verifying that the system has been installed and tested in accordance with the approved plans and specifications shall be provided.

907.7.3 Instructions. Operating, testing and maintenance instructions and record drawings (“as builts”) and equipment specifications shall be provided at an approved location.

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SECTION 916
GAS DETECTION SYSTEMS
Note: gas detection systems shall also comply with NFPA 72

916.1 Gas detection systems. Gas detection systems required by this code shall comply with Sections 916.2 through 916.11.

916.2 Permits. Permits shall be required as set forth in Section 105.6.11.

916.3 Equipment. Gas detection system equipment shall be designed for use with the gases being detected and shall be installed in accordance with manufacturer's instructions.

916.6 Sensor locations. Sensors shall be installed in approved locations where leaking gases are expected to accumulate.

916.11 Inspection, testing and sensor calibration. Inspection and testing of gas detection systems shall be conducted not less than annually. Sensor calibration shall be confirmed at the time of sensor installation and calibration shall be performed at the frequency specified by the sensor manufacturer.

SECTION 503
FIRE APPARATUS ACCESS ROADS

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3.

> **503.1.1 Buildings and facilities**. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

SECTION 507
FIRE PROTECTION WATER SUPPLIES

507.1 Required water supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

507.2 Type of water supply. A water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

> **507.2.1 Private fire service mains**. Private fire service mains and appurtenances shall be installed in accordance with NFPA 24 as amended in Chapter 80.
>
> **507.2.2 Water tanks**. Water tanks for private fire protection shall be installed in accordance with NFPA 22.

507.3 Fire flow. Fire-flow requirements for buildings or portions of buildings and facilities shall be determined by an approved method or Appendix B.

507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6 and Appendix C or by an approved method.

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507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

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Fire Detection for ESS Outdoor Installations - Required
2018/2021 IFC
2020 NFPA 855
2021 NFPA 1 Fire Code

Questions have arisen concerning the requirement for fire detection for outdoor installations of ESS due to a correlation issue with general language and specific language for installation locations. This document explains the history of the detection and alarm requirements, the correlation issue and that detection is still required regardless of the language correlation issue based upon language in Chapter 1 of the fire codes addressing such situations.

In the drafting and acceptance of the 2018 International Fire Code ESS requirements a general section was added requiring the energy management system to transmit an alarm to an approved location for any potentially hazardous temperature or other conditions including short circuits, over voltage or under voltage, early in the process, Section 1206.2.10.3. The purpose was so the fire department would be alerted of a need to respond. “Approved” is defined as acceptable to the fire code official and “approved location” is a common part of design and approval of monitoring/annunciation of signals for fire suppression and fire detection systems. The AHJ approves the location.

The 2018 edition of the IFC had not yet been published when difficulties were identified with this requirement as part of the energy management system. One problem was separating out specific signals that could be tied into listed FACPs. The other problem was identifying what qualified as “potentially hazardous temperatures or *other conditions*”, the language was subjective. In discussing the requirement with fire departments, they didn’t want notification of events that the energy management system could handle safely based upon design and listing, i.e., preventing a cascading thermal runaway or other fire event. Many such events that the system could handle would end up causing a fire department response and upon arrival there would be nothing to address or even see.

Fire service members indicated they wanted to be alerted only when they needed to respond, i.e., a cascading thermal runaway or fire event, and as a result, providing fire detection in accordance with Chapter 9 of the IFC and NFPA 72 was recommended to be followed in place of applying the alarm signal language of Section 1206.2.10.3. Instructors intimate with the ESS code development process that were providing ESS presentations at that time advised attendees not to apply the alarm portion of Section 1206.2.10.3 of the 2018 IFC since it was problematic and instead require fire detection.

2018 IFC

1206.2.10.3 Energy management system. An approved energy management system shall be provided for battery technologies other than lead-acid and nickel cadmium for monitoring and balancing cell voltages, currents and temperatures within the manufacturer’s specifications. The system shall transmit an alarm signal to an approved location if potentially hazardous temperatures or other conditions such as short circuits, over voltage or under voltage are detected.

Based upon the above, the alarm signal language for energy managements systems was not included in the 2020 edition of NFPA 855 or in the 2021 edition language of the IFC, instead, fire detection was included for all the various locations that the ESS may be installed. Indoors, rooftops, open parking garages and outdoors.

Unfortunately, during the 2020 NFPA 855 and 2021 IFC code development process the general language was not completely correlated with the specific location requirements and if one was to simply read the general fire detection language a person could incorrectly believe the fire detection is not required for outdoor installations.

2021 IFC

1207.5.4 Fire detection. An approved automatic smoke detection system or radiant energy-sensing fire detection system complying with Section 907.2 shall be installed in rooms, indoor areas and walk-in units containing electrochemical ESS. An approved radiant energy-sensing fire detection system shall be installed to protect open parking garage and rooftop installations. Alarm signals from detection systems shall be transmitted to a central station, proprietary or remote station service in accordance with NFPA 72, or where approved to a constantly attended location.

1207.5.4.1 System status. Where required by the fire code official, visible annunciation shall be provided on cabinet exteriors or in other approved locations to indicate that potentially hazardous conditions associated with the ESS exist.

1207.8 Outdoor installations. Outdoor installations shall be in accordance with Sections 1207.8.1 through 1207.8.3. Exterior wall installations for individual ESS units not exceeding 20 kWh shall be in accordance with Section 1207.8.4.

1207.8.1 Remote outdoor installations. For the purpose of Table 1207.8, remote outdoor installations include ESS located more than 100 feet (30 480 mm) from buildings, lot lines, public ways, stored combustible materials, hazardous materials, high-piled stock and other exposure hazards.

1207.8.2 Installations near exposures. For the purpose of Table 1207.8, installations near exposures include all outdoor ESS installations that do not comply with Section 1207.8.1 remote outdoor location requirements.

TABLE 1207.8
OUTDOOR ESS INSTALLATIONS[a]

COMPLIANCE REQUIRED		REMOTE INSTALLATIONS[a]	INSTALLATIONS NEAR EXPOSURES[b]
Feature	Section		
All ESS installations	1207.4	Yes	Yes
Clearance to exposures	1207.8.3	Yes	Yes
Fire suppression systems	1207.5.5	Yes[c]	Yes
Maximum allowable quantities	1207.5.2	No	Yes
Maximum enclosure size	1207.5.6	Yes	Yes
Means of egress separation	1207.5.8	Yes	Yes
Size and separation	1207.5.1	No	Yes[d]
Smoke and automatic fire detection	1207.5.4	Yes	Yes
Technology-specific protection	1207.6	Yes	Yes
Vegetation control	1207.5.7	Yes	Yes

a. See Section 1207.8.1.
b. See Section 1207.8.2.
c. Where approved by the fire code official, fire suppression systems are permitted to be omitted.
d. In outdoor walk-in units, spacing is not required between ESS units and the walls of the enclosure.

The portion of the IFC specific to outdoor installations, Section 1207.8 coupled with Table 1207.8 clearly indicates that fire detection is required. This correlation breakdown occasionally occurs and is typically identified as jurisdictions adopt the newer editions of codes and standards and start applying them. It is also common to have general language and specific language applying to the same topic within a code and as a result Chapter 1 of the IFC and Chapter 1 of NFPA 1 Fire Code contain provisions when such a collision occurs. (The IBC has the same language in it's Chapter 1).

Section [A] 102.10 of the IFC specifies that if there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. In this case Section 1207.5.4 is the general requirement for detection and Section 1207.8 is the requirement specific to outdoor installations and would prevail. The second sentence of [A]102.10 would also default to the fire detection being required because it would be the most restrictive in this case.

> **[A] 102.10 Conflicting provisions**. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in a specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

The bottom line is that fire detection is required for outdoor installations of ESS other than detached one- and two-family dwellings and townhouses.

In NFPA 855 the correlation issue involved the general requirement for detection with the outdoor and rooftop installation specific requirements.

> **2020-NFPA 855**
>
> **4.10 Smoke and Fire Detection**. 4.10.1 All fire areas containing ESS systems located within buildings or structures shall be provided with a smoke detection system in accordance with NFPA 72.
>
> > **4.10.4** The smoke detection system shall be permitted to be replaced with a radiant energy–sensing detection system installed in accordance with NFPA 72 in open parking garages and similar occupancies where conditions negatively impact the use of smoke detection technologies.
>
> **4.4.3 Outdoor Installations**. Outdoor ESS installations shall comply with this section and as detailed in Table 4.4.3.
>
> **4.4.4 Rooftop and Open Parking Garage Installations**. Rooftop and open parking garage ESS installations shall comply with this section and as detailed in Table 4.4.4.

However, since the application of NFPA 855 by an AHJ is through its extraction into NFPA 1, similar language in NFPA 1, Chapter 1, as is in the IFC and IBC, provides for the specific location language to be applied.

> **2021 NFPA 1 Fire Code**
>
> **1.3.3.2** When a conflict between a general requirement and a specific requirement occurs, the specific requirement shall apply.

Table 4.4.3 Outdoor Stationary ESS Installations

Compliance Required	Remote Locations[a]	Locations Near Exposures[b]	Reference
Administrative	Yes	Yes	Chapters 1–3
General	Yes	Yes	Sections 4.1–4.3
Maximum size	Yes	Yes	4.4.3.2
Clearance to exposures	NA	Yes	4.4.3.3
Means of egress separation	NA	Yes	4.4.3.4
Walk-in units	Yes	Yes	4.4.3.5
Vegetation control	Yes	Yes	4.4.3.6
Enclosures	Yes	Yes	4.4.3.7
Size and separation	No	Yes[c]	Section 4.6
Maximum stored energy	No	Yes	Section 4.8
Smoke and fire detection	Yes	Yes	Section 4.10
Fire control and suppression	Yes[d]	Yes	Section 4.11
Water supply	Yes[d]	Yes	Section 4.13
Signage	Yes	Yes	4.3.5
Occupied work centers	Not allowed	Not allowed	Section 4.7
Technology-specific protection	Yes	Yes	Chapters 9–13

NA: Not applicable.
[a]See 4.4.3.1(1).
[b]See 4.4.3.1(2).
[c]In outdoor walk-in units, spacing is not required between ESS and the enclosure walls.
[d]When agreeable with the ESS owner and approved by the AHJ, fire suppression systems and water supply are permitted to be omitted.

Table 4.4.4 Rooftop and Open Parking Garage ESS Installations

Compliance Required	Rooftops*	Open Parking Garages†	Reference
Administrative	Yes	Yes	Chapters 1–3
General	Yes	Yes	Sections 4.1–4.3
Maximum size	Yes	Yes	4.4.3.2
Means of egress separation	Yes	Yes	4.4.3.4
Walk-in units	Yes	Yes	4.4.3.5
Enclosures	Yes	Yes	4.4.3.7
Clearance to exposures	Yes	Yes	4.4.4.2
Fire suppression and control	Yes	Yes	Section 4.11
Rooftop installations	Yes	No	4.4.4.4
Open parking garages	No	Yes	4.4.4.5
Size and separation	Yes	Yes	Section 4.6
Maximum stored energy	Yes	Yes	Section 4.8
Elevation	Yes	Yes	4.3.9
Smoke and fire detection	Yes	Yes	Section 4.10
Signage	Yes	Yes	4.3.5
Occupied work centers	Not allowed	Not allowed	Section 4.7
Open rack installations	Not allowed	Not allowed	4.3.11
Technology-specific protection	Yes	Yes	Chapters 9–13

NA: Not applicable.
*See 4.4.4.1(1).
†See 4.4.4.1(2).

Standard No. 1204-2		
Kern County Fire Department Fire Prevention	**Solar Panels Ground Mounted (Commercial)** Fire Protection Requirements	Fire Marshal Date: May 25, 2023

Scope

This standard is for the requirements and construction of commercial ground mounted solar installations and is pursuant to the 2022 California Fire Code and Kern County Ordinance.

Requirements

This standard uses guidelines from several sources which outline solar panel installation requirements. This standard will be associated with the proper installation of photovoltaic ground mounted solar systems. It will be applied indefinitely and reviewed/revised as part of the new code adoption process or as otherwise necessary.

Water Supply

When required by the fire code official, fire protection water shall be provided for ground mounted solar systems of one MW or larger. The presence of structures, location in the wildland areas, and the size of the array will determine the amount of fire protection water.

One 10,000-gallon tank with a 4" NSM (National Standard Male) connection will be provided for fire department use. A level indicator shall be attached to the water tank. Tank and outlet location shall be accessible to emergency vehicles, near the entrance and approved by the Kern County Fire Department. Water tank design, materials, fabrication, and installation shall be in accordance with NFPA 22. Submit plans and obtain a building permit from the Kern County Public Works Inspection Division for water tanks that exceed 5,000 gallons. (2022 CBC Section 105)

When a fire water source is available within a reasonable distance, the fire water tank requirement may be waived. This fire water source must have a 4" NSM (National Standard Male) connection. All water sources shall be approved by the Kern County Fire Department.

Clearance/Combustibles

1. A minimum clearance of 10' is required for all weeds and combustibles around the project perimeter. All vegetation under the array shall be maintained to a height of 6" or less.
2. In SRA and Wildland areas, 30' of clearance of all combustibles shall be maintained.

Access

1. A 20' minimum road width- is required around the perimeter of the entire project for the fire department and emergency vehicles.
2. All internal roads shall be a minimum of 20' wide.
3. Fire apparatus access roads shall be constructed with an asphalt, concrete, or other approved driving surface capable of supporting the imposed load of fire apparatus weighing up to 75,000 pounds.
4. Separations and clear spaces between solar panel array blocks and/or other associated equipment on the interior of the solar array that are twelve (12) feet or larger in width shall be provided with a compacted surface capable of supporting the imposed load of fire apparatus weighing up to 20,000 pounds.

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Response to Comment Letter 6: KCFD

6-A

The comment describes the KCFD as the local fire authority for the project. The comment states that the proposed project will require Fire Department plan review prior to construction and must meet requirements set forth in the KCFD Solar Panel standard. Additionally, the comment indicates that the proposed project would be subject to payment of applicable fees prior to permit issuance. The project will comply with all applicable KCFD requirements. This comment and the associated exhibits attached to the letter do not otherwise raise a substantive issue on the content of the Draft EIR. The comments provided have been noted for the record, and no revisions to the Draft EIR are required.

6-B

The comment states that battery energy storage systems (BESS) require a separate and direct permit process with KCFD and states requirements necessary for KCFD approval of permits for BESS. The County acknowledges the comments provided; such requirements as stated will be made conditions of approval for the proposed project. This comment does not otherwise raise a substantive issue on the content of the Draft EIR. The comments provided have been noted for the record, and no revisions to the Draft EIR are required.

6-C

The comment states that KCFD will provide more detailed review comments at the time of KCFD plan review and building permit issuance. KCFD also provided review guide sheets containing application procedures as well as information and guidelines pertaining to the testing, maintenance, fire prevention, and fire detection. This comment does not raise a substantive issue on the content of the Draft EIR. The comments provided have been noted for the record, and revisions to the Draft EIR are not required. The County thanks the author for their comments and participation in the public review of the environmental document.

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Comment Letter 7: SoCalGas

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Transmission Technical
Services Department

9400 Oakdale Ave
Chatsworth, CA 91311
SC9314

June 4, 2026

Mark Tolentino
Kern County Planning & Natural Resources Dept
TolentinoM@kerncounty.com

Subject: **Galaxy Solar PV and Storage Project by Galaxy Solar Storage**

DCF: **1124-26NC**

The Transmission Department of SoCalGas does not operate any facilities within your proposed improvement. However, the Distribution Department of SoCalGas may maintain and operate facilities within your project scope.

To assure no conflict with the Distribution's pipeline system, please e-mail them at:

NorthwestDistributionUtilityRequest@semprautilities.com

A

Best Regards,
Nerses Papazyan
SoCalGas Transmission Technical Services
SoCalGasTransmissionUtilityRequest@semprautilities.com

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Response to Comment Letter 7: SoCalGas

7-A

The comment notes that the Transmission Department of SoCalGas does not operate facilities within the project scope, however the Distribution Department may maintain and operate facilities. A contact email was given to assure no conflict with the Distribution's pipeline system occurs. The proposed project will incorporate a standard condition of approval as part of the requested Conditional Use Permits that requires the project proponent coordinate with SoCalGas prior to the issuance of building permits. The comment does not raise a substantive issue on the content of the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not necessary. The County thanks the author for their comment and participation in the public review of the environmental document.

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Comment Letter 8: Twenty-Nine Palms Band of Mission Indians

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TWENTY-NINE PALMS BAND OF MISSION INDIANS

46-200 Harrison Place, Coachella, CA 92236. Ph. 760.863.2444. Fax: 760.863.3449

June 09, 2026

Kern County Planning and Natural resources Department
Attention: Mark Tolentino, Planner III
2700 “M” Street, Suite 100,
Bakerfield, CA 93301

RE: Notice Of Availability For Public Review and Hearing on the Draft for The Proposed Discovery (Galexy) Solar PV And Storage Project

Dear Mark,

This letter is regarding a consultation in compliance with AB-52 for the proposed project Galexy Solar PV and Storage Project, which is a photovoltaic solar facility with associated infrastructure necessary to generate up to 600-megawatt (MW) of renewable electrical energy, which may include up to 4 gigawatt-hours of storage capacity. This project would sit on approximate 3.400-acre project site, across 162 privately owned parcels, in an unincorporated area of southeastern kern County, California. A

After reviewing the proposed project, the Twenty-Nine Palms Band of Mission Indians (Tribe) has determined: the project is outside of the known Chemehuevi Traditional Use Area (TUA). The other tribes who do have cultural affiliation with the project area should be contacted. B

If you have any questions, please do not hesitate to contact the Tribal Historic Preservation Office at (760)-775-5566 or by email at cristian.crump@29palmsbomi-nsn.gov

Sincerely,

Cristian Crump

Cristian Crump
Cultural Resource Specialist, Twenty-Nine Palms Band of Mission Indians

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Response to Comment Letter 8: Twenty-Nine Palms Band of Mission Indians

8-A

The comment describes consultation in compliance with AB-52 and summarizes the project components. The comment does not raise a substantive issue on the content of the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not necessary.

8-B

The comment states that the project is outside of the Chemehuevi Traditional Use Area and recommends other tribes who do have cultural affiliation with the project area be contacted. The comment does not raise a substantive issue on the content of the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not necessary. The County thanks the author for their comments and participation in the public review of the document.

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Interested Parties

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Comment Letter 9: Robert K and Kathryn M. Dyas

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Mark Tolentino

From: Keith Dyas <keith.dyas77@gmail.com>
Sent: Wednesday, May 13, 2026 10:19 AM
To: Mark Tolentino
Subject: Comments on DEIR for the Proposed Discovery Solar PV and Storage Project (Dyas)

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or provide information unless you recognize the sender and know the content is safe.

Thank you for the opportunity to comment on subject project. Our concerns are in regard to potential impacts to our physical access to our property adjacent to the project. A

Fortunately, Mr. Mark Tolentino has explained that actions to be taken by the project proponent will preserve and actually enhance our access to our parcels.

We would also like to take this opportunity to emphasize the importance of protecting the rights of adjacent property owners whenever new projects require removal of future road reservations on section and mid-section lines. Afterall, property buyers rely heavily on the preservation of the access rights that are presented in Kern County Planning documents at the time of purchase. B

Sincerely,

Robert K. and Kathryn M. Dyas
P.O. Box 687
Rosamond, CA 93560

(661) 609-0486

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Response to Comment Letter 9: Robert K. and Kathryn M. Dyas

9-A

The commenter states that potential impacts to physical access to their property was previously a concern; however, conversations with the County have demonstrated that actions taken by the project proponent will preserve and enhance access to their property parcels. The comment has been noted for the record, and revisions to the Draft EIR are not required.

9-B

The commenter states the importance of protecting the rights of adjacent property owners when new projects require removal of future road reservations on section and mid-section lines, as property buyers rely on the preservation of access rights presented in Kern County Planning documents at the time of purchase. The comment has been noted for the record, and revisions to the Draft EIR are not required. The County thanks the author for their comments and participation in the public review of the document.

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Comment Letter 10: Roy Woolsey

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Mark Tolentino

From: Roy Woolsey <RoyWoolsey@sbcglobal.net>
Sent: Friday, May 29, 2026 7:22 AM
To: Mark Tolentino
Cc: Eric Nordstrom; Barbara Nordstrom; Patty Woolsey; John A McKnight; Michele Leffler
Subject: Comments on Draft EIR, Galaxy Solar PV and Storage Project

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or provide information unless you recognize the sender and know the content is safe.

Kern County Planning and Natural Resources Dept. ***Sent by e-mail; please confirm receipt.***
ATTN: Mark Tolentino, Planner III
2700 "M" Street, Suite 100
Bakersfield, CA 93301

Dear Mr. Tolentino:

I have the notice of the availability for public review and hearing on the draft Environmental Impact Report (EIR) for the proposed solar PV and storage project. I am writing to state my full support for the project moving ahead as quickly as possible. I believe the highest and best use of this very remote land is for solar panels per the proposed project, so this project will allow the land to achieve its highest and best use.

I have briefly reviewed the draft EIR, which consists of over five thousand (5,000) pages! I'm quite disappointed that law and governmental requirements dictate such a time consuming, costly and detailed report simply to put solar panels on approximately 3,400 acres of very remote and otherwise unused land in Kern County. All of this bureaucracy substantially delays a project that should already have been approved and moving forward with installation. I would not make any changes to the project in response to the EIR.

A

I am the owner of 160 acres (NE quarter of Section 9, T10N, R11W, S.B.M.) which are part of the approximately 3,400 acres that are part of this project. The applicant, through TerraGen, has an option to lease this 160 acres of remote vacant land for almost 35 years for this project, but significant rental payments do not happen under the terms of the lease option until the project is approved and moves to the installation phase. So I am losing considerable rent with all the time the approval process is taking.

B

My comments on the draft EIR are as follows:

1. The aesthetics are absolutely not an issue for solar panels in this remote location. They are hardly visible from State Route 58 as indicated in the simulated views given in the EIR.
2. Once the system is installed, there should be no adverse impacts whatsoever on air quality, yet the EIR spends 65 pages discussing air quality. At least the EIR concludes the project's individual contribution would be "less than significant," with which I certainly agree.
3. While there may be some damage to plant and animal life during installation of the solar panels, such life has an amazing resilience and should promptly recover from any damage during

C

installation. Biological resources should not be a problem in this remote area, and should certainly not warrant 94 pages of biological resources discussion.
4. While the project will consume considerable energy for fabrication and installation, the installed project will return energy many, many times over, so energy use should absolutely not be a concern.
5. While the project will emit greenhouse gases during fabrication and installation, the savings in greenhouse gas emissions over the project lifetime due to society using less fossil fuels and more energy produced by the project will be so many times the greenhouse gas emissions during fabrication and installation as to make any discussion of this topic rather insane! All parties involved in this project should very heartily endorse the project proceeding as quickly as possible, because of the reduced greenhouse gas emissions which will result from the project.
6. I expect that transportation in the vicinity of the project will be improved, subject to security concerns of appropriately fencing in and protecting the installation. In the spring of 2024 I attempted to visit the 160 acres which are under the lease option described above. I drove a four-wheel drive vehicle to Silver Queen Road and then to Mojave Boulevard. There were deep ruts in Mojave Boulevard such that almost two miles before reaching the property I had to stop and turn around or my vehicle would have gotten stuck in a deep rut and it would have been a major effort to get out. I suspect either Mojave Boulevard will be improved as part of the project or other access points will become available just for necessary service of the solar panel installation.
7. There should not be any issues with other topics included in the EIR, such as hazards, hazardous materials, hydrology and water quality, mineral resources, noise, public services, etc., and I am glad the EIR states that environmental effects are found to be less than significant.
8. Alternatives to this project are all less attractive than the project as proposed.

C

I recently had the opportunity to meet with the Honorable Vince Fong, representing this part of Kern County in the United States Congress (photo below). I discussed the project with him and he offered to contact members he knows in the Kern County Board of Supervisors in support of this project if I so desired. Please advise if it would be helpful for advancing this project if I were to take Mr. Fong up on his offer.

D

In conclusion, I heartily recommend the project proceed as proposed, I see nothing in the EIR that would require changes to the project, and I only regret that the whole EIR process creates so much delay and puts such a burden on projects such as this.

Yours very truly,
Roy B. Woolsey
CA DRE # 02133812



Roy Woolsey with the Honorable Vince Fong

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Response to Comment Letter 10: Roy Woolsey

10-A

The commenter expresses full support of the project and believes solar development represents the best use of the project site. The commenter has reviewed the Draft EIR and recommends no changes to the project. The comment has been noted for the record, and revisions to the Draft EIR are not required.

10-B

The commenter is the owner of 160 acres of the project parcels. As rental payments do not occur until the project is approved, the commentor is losing considerable rent during the approval process phase. The comment has been noted for the record, and revisions to the Draft EIR are not required.

10-C

The commenter describes various environmental impacts with overall support for the project. The commenter asserts that the project's potential visual impacts, air quality effects, biological impacts, and energy use concerns are minimal or overstated, especially given the site's remote location. The commenter believes the project will ultimately provide significant greenhouse gas reductions and should be approved quickly due to the long-term environmental benefits. The commenter also expects transportation and site access to improve as part of the project, noting current road conditions and the need for maintenance. Additionally, the commenter finds the Draft EIR's conclusions on hazards, hydrology, noise and other issues appropriate and believes the proposed project is preferable to the alternatives included in the Draft EIR. The comment has been noted for the record, and revisions to the Draft EIR are not required.

10-D

The commenter has discussed the project with Vince Fong, who represents Kern County in the United States Congress, and offered to contact members of the Kern County Board of Supervisors in support of the project. The commenter concludes by reiterating their support for the project but regrets the delay of the approval process. The comment has been noted for the record, and revisions to the Draft EIR are not required. The County thanks the author for their comments and participation in the public review of the document.

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Comment Letter 11: Defenders of Wildlife and California Native Plant Society

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June 12, 2026

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

Delivered via email to TolentinoM@kerncounty.com

Re: Draft Environmental Impact Report for the Proposed Galaxy Solar PV and Storage Project; SCH No. 2025081409

Dear Mr. Tolentino,

Thank you for the opportunity to provide comments in response to the Draft Environmental Impact Report (DEIR) for the proposed Galaxy Solar PV and Storage Project (Project). Defenders of Wildlife (Defenders) protects and restores America's wildlife at risk of extinction, advancing a vision of a future in which wildlife thrives, sustained by broad public support and a resilient network of healthy lands and waters and has nearly 2.1 million members and supporters in the United States, with more than 311,000 residing in California. The California Native Plant Society (CNPS) is a non-profit environmental organization with over 13,000 members in 35 Chapters across California and Baja California, Mexico. CNPS's mission is to protect California's native plants and their natural habitats, today and into the future, through science, education, stewardship, gardening, and advocacy. We work closely with decision-makers, scientists, and local planners to advocate for well-informed policies, regulations, and land management practices. A

Our organizations strongly support renewable energy generation. A low-carbon energy future is critical for California's economy, communities and environment. As we transition toward a clean energy future, it is imperative that we consider the near-term impacts of renewable energy development on our biodiversity, fish and wildlife habitat and natural landscapes while addressing the long-term impacts of climate change. Therefore, renewable energy projects must be planned, sited, developed and operated to avoid, minimize and mitigate adverse impacts on wildlife and lands with known high-resource values. B

The proposed Project is a photovoltaic solar facility that would generate up to 600 megawatts (MW) of renewable energy paired with a battery energy storage system of up to 4 gigawatt-hours proposed on approximately 3,400 acres across 162 privately-owned parcels in unincorporated southeastern Kern County. The Project site is located at the northern edge of the Antelope Valley and consists primarily of undeveloped Mojave Desert lands within a region that has experienced substantial utility-scale solar development.

B cont.

Comments

We offer the following comments on the DEIR for the proposed Project.

Project Objectives

The DEIR identifies several applicant-submitted Project objectives that are environmental in nature, including maximizing the use of existing transmission infrastructure to minimize new disturbance and siting and designing the Project in an environmentally responsible manner consistent with current Kern County guidelines.

We appreciate the inclusion of environmental considerations within the Project objectives. If minimizing disturbance and environmentally responsible design are stated objectives, then conserving biological resources and avoiding lands with high conservation value must be incorporated into those objectives and into the design of the Project. The Project site consists primarily of undeveloped Mojave Desert habitat. Undeveloped desert lands frequently provide high-value habitat for special-status species, function as foraging habitat and refugia and support local wildlife movement. The Project objectives should explicitly recognize that preferred sites are those that both minimize new disturbance and conserve biological resources.

C

Reliance on a Future Incidental Take Permit Does Not Satisfy the California Environmental Quality Act (CEQA)

Throughout the DEIR, the County's response to identified biological impacts is to require the project proponent to comply with the avoidance, minimization and mitigation requirements set forth in an Incidental Take Permit (ITP) issued for the project by CDFW (California Department of Fish and Wildlife). This language appears in MM 4.4-8 (western Joshua tree/WJT), MM 4.4-11 (western burrowing owl/BUOW), MM 4.4-13 (Swainson's hawk/SWHA) and MM 4.4-18 (Crotch's bumble bee/CBB), among others.

D

The California Endangered Species Act (CESA) and CEQA are independent regulatory regimes that serve different purposes. CESA regulates the take of state-listed species. An ITP issued under Fish and Game Code §2081 authorizes incidental take and requires the permittee to minimize and fully mitigate the impacts of that take on the listed species. CESA does not address impacts to non-listed species, foraging habitat for species whose listing status changes after permit issuance, wildlife connectivity, cumulative effects or the other biological resource impacts that a CEQA lead agency must analyze and mitigate.

CEQA requires the lead agency to identify all significant environmental effects and to impose feasible mitigation measures. Public Resources Code §21002 states that public agencies should not approve projects as proposed if there are feasible mitigation measures available that would substantially lessen the significant environmental effects of those projects. Public Resources Code §21002.1(b) requires each public agency to mitigate or avoid the significant effects on the environment of projects it approves whenever it is feasible to do so. Before approving the Project, the County must find that changes or alterations have been required in or incorporated into the Project to mitigate or avoid its significant environmental effects.[1] The County, not CDFW, is the lead agency and must exercise its own independent judgment in identifying and adopting feasible mitigation.[2,3]

D cont.

CEQA Guidelines §15126.4(a)(1)(B) provides that formulation of mitigation measures shall not be deferred until some future time. A lead agency may defer the specifics of mitigation only where it commits itself to the mitigation, adopts specific performance standards the mitigation will achieve and identifies the types of potential actions that can feasibly achieve that performance standard. Mitigation measures that simply require the applicant to comply with the requirements of "any ITP issued for the project by CDFW" adopt no performance standards and identify no specific actions. They are deferred mitigation, and the open-ended performance standards they contain are precisely what CEQA forbids.[4]

This concern is compounded by the fact that several of the species at issue are not currently listed under CESA. The DEIR acknowledges that BUOW was designated a CESA candidate species in October 2024, and CBB is also a state candidate species. MM 4.4-11 and MM 4.4-13 make this explicit by conditioning their ITP provisions on the species remaining a listed or

[1] Pub. Resources Code, § 21081(a)(1).
[2] CEQA Guidelines § 15041.
[3] CEQA Guidelines § 15084(e).
[4] Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296, 306–308; Communities for a Better Environment v. City of Richmond (2010) 184 Cal.App.4th 70, 92–95; Endangered Habitats League, Inc. v. County of Orange (2005) 131 Cal.App.4th 777, 793–794; Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, 525.

candidate species "at the commencement of project construction." The lead agency cannot satisfy CEQA by adopting mitigation that is contingent on the discretionary act of a separate agency that may never occur.

We request that the Final EIR identify and adopt specific, enforceable avoidance, minimization and mitigation measures, including compensatory mitigation, for each significant biological impact, independent of the issuance of a possible future CDFW ITP.

D cont.

Protocol-Level Surveys

We appreciate that the DEIR is supported by protocol-level surveys for several species, including Mojave desert tortoise and SWHA. However, protocol-level surveys do not appear to have been conducted for BUOW, Mohave ground squirrel (MGS) or CBB.

The DEIR states that a BUOW habitat assessment and burrow survey were conducted, that a habitat suitability assessment was conducted for MGS and that no surveys were conducted for CBB despite the DEIR's conclusion that the Study Area provides high-quality foraging habitat and moderate-quality nesting habitat for the species. For CBB, the DEIR instead relies on an observation of a single individual recorded approximately one mile from the Study Area during surveys for a different project. A habitat assessment is not a substitute for a protocol-level survey, and an observation recorded for another project cannot establish whether the species occurs within the Study Area, where it occurs or how the Project would affect it.

Protocol-level surveys are not simply a pre-construction compliance step. They are foundational to establishing the environmental baseline, determining impact significance and developing appropriate avoidance, minimization and mitigation measures. CEQA requires an accurate baseline against which to evaluate impacts, and the analysis must occur before project approval. Without protocol-level surveys for BUOW, MGS or CBB, the DEIR cannot reliably determine whether these species are present, where they occur within the Project site or how the Project could impact them. The pre-construction surveys required by MM 4.4-11, MM 4.4-18 and MM 4.4-19 are after-the-fact compliance steps; they do not establish the baseline or allow the public and decision-makers to evaluate the adequacy of mitigation.

E

In its scoping comments on the Project, CDFW expressly recommended that focused habitat assessments and/or protocol-level surveys be conducted and documented within the DEIR, and used to inform the impact analysis, the development of Project alternatives

and the avoidance, minimization and mitigation measures. CDFW specifically recommended focused surveys for MGS following the Mohave Ground Squirrel Survey Guidelines,[5] with the survey methodology submitted to CDFW for review and approval before surveys begin, and a habitat assessment followed by focused surveys for Crotch's bumble bee following CDFW's Survey Considerations for CESA Candidate Bumble Bee Species.[6] The DEIR did neither. The County's habitat assessment and burrow surveys do not satisfy these recommendations, and a future ITP cannot resolve a defective baseline because CEQA requires the analysis to be completed before the Project is approved.

E cont.

We request that the Final EIR be supported by species-specific protocol-level surveys for BUOW, MGS and CBB, conducted in accordance with CDFW guidance, and that the survey results be used to determine impact significance and to develop avoidance, minimization and mitigation measures.

Deferred Biological Management Plans

The DEIR defers the development of several key biological management plans to a future date, after circulation of the DEIR. These include the Joshua Tree Preservation Plan (MM 4.4-8), the Raven Management Plan (MM 4.4-14), the Avian Mortality Monitoring Program (MM 4.4-17) and the Weed Control Plan (MM 4.4-21). The DEIR similarly contemplates a Mohave Ground Squirrel Avoidance and Monitoring Plan that has not been prepared.

The purpose of CEQA is to inform the public and decision-makers of a project's potential environmental impacts and to allow for meaningful review and comment during the environmental review process. Deferring the development of these plans until after circulation of the DEIR prevents the public from evaluating whether the proposed avoidance, minimization and mitigation measures would reduce impacts to less than significant. While CEQA Guidelines §15126.4(a)(1)(B) permits deferral of the specifics of mitigation in narrow circumstances, it requires the lead agency to adopt specific, measurable performance standards and to identify the types of actions that can feasibly achieve those standards. Generic commitments to follow agency "guidelines" do not meet that standard.

F

[5] California Department of Fish and Wildlife. 2023. *Mohave Ground Squirrel Survey Guidelines*.
[6] California Department of Fish and Wildlife. 2023. *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*.

We request that the Final EIR include fully developed biological management plans or, at minimum, specific and measurable performance standards for each plan sufficient to allow the public and decision-makers to evaluate their adequacy.

F cont.

Western Joshua tree

The DEIR identifies approximately 8,889 live WJT stems and approximately 3,465 dead WJT stems within the Project development footprint, and concludes that impacts to WJT are significant and unavoidable. The Project proposes to relocate a minimum of only 900 onsite WJT stems. MM 4.4-8 defers mitigation for WJT impacts to coordination with CDFW through take coverage permitting and does not establish defined survival thresholds, a minimum monitoring period, annual reporting requirements or adaptive management triggers for relocated trees.

Translocation of WJT remains scientifically uncertain. An impact of this magnitude, acknowledged as significant and unavoidable, requires fully formulated and enforceable mitigation at the time of EIR certification, not a placeholder commitment to comply with whatever a separate agency might require in a permit the project proponent has not yet obtained. Compliance with the Western Joshua Tree Conservation Act is not a substitute for the County's independent CEQA obligation to identify performance standards, monitoring requirements and the term of habitat preservation in the EIR itself.[7]

G

We also note that, although the DEIR contemplates relocation of WJT stems to onsite or offsite lands and the acquisition of offsite compensatory mitigation lands, it does not state that those lands would be protected in perpetuity through a recorded conservation easement held by a qualified conservation organization, as defined by CA Civil Code §815.3. WJT is a long-lived desert species and the Project's impacts would be permanent. Mitigation lands must be held in perpetuity by a qualified conservation organization, as defined by CA Civil Code §815.3. Alternatively, credits could be purchased in a CDFW-approved mitigation bank.

We request that the Final EIR identify the compensatory mitigation required for their loss, establish enforceable performance standards including defined survival thresholds, a minimum monitoring period, annual reporting requirements and adaptive management

[7] California Department of Fish and Wildlife. Western Joshua Tree Census Instructions, available at https://wildlife.ca.gov/Conservation/Environmental-Review/WJT/Permitting/Census-Instructions; California Department of Fish and Wildlife. 2022–2024. Western Joshua Tree (*Yucca brevifolia*) Candidate Species Status Review and Take Authorization Guidance.

triggers and place any WJT preservation areas under a recorded conservation easement protected in perpetuity.

G cont.

Burrowing Owl Avoidance Buffers

The DEIR identifies BUOW as present within the Study Area, with 13 occupied burrows documented, 10 of which are located within the Project site. MM 4.4-11 provides that no-disturbance buffers around occupied burrows "may be up to 500 meters" and that "a smaller buffer may be established by the Lead Biologist(s)." The measure does not identify the specific buffer distances that apply based on time of year and level of construction disturbance, and it allows buffer reductions at the unilateral discretion of a project-affiliated biologist.

A discretionary determination by a project-affiliated biologist is not a substitute for CDFW concurrence and does not constitute an enforceable performance standard. The Department's 2012 Staff Report on Burrowing Owl Mitigation provides specific buffer distances based on season and level of disturbance.[8] We recommend that MM 4.4-11 incorporate the table of avoidance buffers below.

H

Table 1: Burrowing Owl Avoidance Buffers

Location	Time of Year	Level of Disturbance		
		Low	**Med**	**High**
Nesting Sites	April 1 – Aug 15	200 meters	500 meters	500 meters
	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

We further recommend that any reduction in buffer distance occur only with prior written concurrence from CDFW.

Swainson's Hawk Compensatory Mitigation and Preconstruction Surveys

The DEIR identifies the Study Area as providing moderate-quality SWHA foraging and nesting habitat and acknowledges that lands within the five-mile buffer largely consist of potential Swainson's hawk foraging habitat. MM 4.4-13 proposes to mitigate the loss of moderate-quality Swainson's hawk foraging habitat within five miles of an active nest "at a ratio up to 0.5:1." This ratio is insufficient as the minimum recommended for renewable energy

I

[8] California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation.

projects in the Antelope Valley is at a 2:1 ratio.[9] CDFW reiterated this recommendation in its scoping comments on the Project, recommending compensation for the loss of Swainson's hawk foraging habitat at a minimum 2:1 ratio for habitat impacted within five miles of an active nest and defining a nest as active if it was used one or more times within the last five years. A 0.5:1 ratio would result in a net loss of functional foraging habitat in a region where the species' breeding population is already in decline. The use of "up to" compounds the problem by establishing a discretionary ceiling rather than a defined minimum ratio.

I cont.

We request that MM 4.4-13 be revised to require compensatory mitigation for the loss of Swainson's hawk foraging habitat within five miles of an active nest at a minimum 2:1 ratio that ensures no net loss of functional foraging habitat per the relevant guidelines as well as CDFW's recommendation for this specific project.

Coordination with the Bureau of Land Management

The DEIR states that land managed by the Bureau of Land Management (BLM) is located immediately east of the Project site. The DEIR does not document any coordination with BLM or analyze the Project's potential effects on adjacent BLM-managed lands. We request that the Final EIR document coordination with BLM and analyze the Project's potential edge effects on adjacent BLM-managed lands.

J

Additional Recommended Revisions to Mitigation Measures

We recommend the following additional revisions to strengthen the DEIR's biological mitigation measures.

- **MM 4.4-2:** The Worker Environmental Awareness Training Program should be provided in all languages spoken by on-site personnel, so that every worker can understand and comply with the special-status species protection measures.
- **MM 4.4-3(b):** The measure provides that construction-related activities outside of the impact zone "shall be avoided." This should be revised to provide that such activities "shall be prohibited".
- **MM 4.4-3(j):** The DEIR should minimize or avoid nighttime construction work. While the measure appropriately reduces the speed limit to 10 miles per hour during night work, daytime work is preferable to reduce impacts to wildlife.

K

[9] California Energy Commission and Department of Fish and Game. 2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties.

– **Collection systems:** The DEIR should analyze the relative impacts of overhead versus underground collection systems on ground-dwelling species, including desert tortoise and desert kit fox, and should specify that collection system siting and design will avoid and minimize impacts to these species.

K cont.

Alkali Mariposa Lily Mitigation

The development of specific mitigation measures for *Calocortus striatus* (alkali mariposa lily) should not be deferred until after project approval. There is significant information regarding the location of individual plants and the proposed panel placement to determine the anticipated impacts to the species and to develop mitigation measures, including performance standards and a monitoring plan. CEQA § 15126.4 (a)(1)(B) states that "mitigation measures shall not be deferred until some future time," unless "it is impractical or infeasible to include those details during the project's environmental review." These measures should be detailed in a final EIR.

The preservation of onsite populations should be prioritized over any form of compensatory mitigation. Any efforts for restoration, enhancement, and/or population translocation must be carefully planned and include ongoing monitoring and contingencies for active management to have any chance at being successful. According to research commissioned by CDFW, most compensatory mitigation efforts for special status species fail, showing that ~15% of transplantation, relocation, or reintroduction efforts reviewed in the study were considered successful.[10] Preservation of onsite individuals or the conservation of offsite populations at a ratio of 2:1 for area of occupancy and individuals impacted should be prioritized over efforts to recreate populations.

L

Preconstruction surveys following the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities[11] should occur at the soonest time prior to ground disturbance that lilies would be easily identifiable. Each individual anticipated to be impacted by project activities should be flagged for future seed collection and salvage. Flagged plants should be monitored every two weeks following the peak bloom period to evaluate seed development. Seed should be collected from each individual at an appropriate time as guided by monitoring. A portion of

[10] Fiedler, P.L., 1991. Mitigation-related Transplantation, Relocation and Reintroduction Projects Involving Endangered

[11]

collected seed shall be placed into long term seed banking by an appropriate entity (i.e. California Botanic Garden), remaining seed should be transferred to a qualified native plant nursery to be grown to support future needs to meet performance standards of offsite conservation or onsite reintroduction. Seedlings should be grown for a minimum of three years and no more than five years prior to transplanting. Individual bulbs should be salvaged when dormant in late summer or early fall prior to ground disturbance. Bulbs should be transferred to a qualified native plant nursery to be grown as nursery stock to support future needs to meet performance standards of offsite conservation or onsite reintroduction. Salvaged bulbs should be grown for a minimum of one year but no more than five years prior to transplanting. Salvaged bulbs and seed grown plants shall be planted in fall while dormant.

An offsite conservation area with a suitable habitat occupied by alkali mariposa lilies to achieve a 2:1 ratio of suitable occupied habitat to habitat impacted by project activities shall be identified. Conservation lands shall be recorded as a conservation easement or be acquired and transferred to a land trust qualified to manage alkali mariposa lily. Conserved populations should be monitored throughout the life of the project and be actively managed as needed to maintain population numbers. Monitoring should occur each year for the first five years to establish baseline population data. Subsequent monitoring should occur every three years. If monitoring shows a decline in populations active management should be implemented. Active management should include but is not limited to invasive species control, seed collection, seed bulking, and seed distribution.

L cont.

If it is not possible to conserve offsite habitat at a 2:1 ratio, then reintroduction of salvaged bulbs and seed grown plants shall occur on disturbed areas of the project site, no disturbance to populations avoided by project impacts shall occur in the reintroduction process. Planting shall occur in fall prior to seasonal precipitation, care shall be taken to ensure that bulbs are correctly oriented. Transplanting shall achieve a performance standard of no net loss of individuals throughout the life of the project. Transplanted individuals shall be monitored and managed each year for five years after planting. Management of invasive weeds will be essential to the successful establishment of transplanted alkali mariposa lilies. Monitoring will continue each year for three years after the initial five-year monitoring and management period. If populations are achieving performance standards for three years without management, then monitoring may occur every third year. If at any point during the life of the project performance standards are not being met then active management will occur until performance standards are met, followed by three years of annual monitoring, returning to monitoring every three years if

populations are meeting performance standards without active management. Active management may require additional seed collection from the project site to produce additional seed grown plants to achieve performance standards.

There is a high probability that changes in hydrology caused by project construction may have long term impacts to alkali mariposa lilies not directly impacted by project activities. Populations of alkali mariposa lily not directly impacted by project activities but within the project footprint shall be monitored throughout the life of the project. These populations should be monitored for five consecutive years after construction is complete. If monitoring shows that populations are stable then monitoring may occur every third year. If at any point monitoring shows a decrease in population numbers active management will be implemented until population numbers achieve no net loss of individuals. Active management should include but is not limited to invasive species control, seed collection, seed bulking, and seed distribution.

L cont.

Conclusion

The DEIR's repeated reliance on a future, contingent CDFW ITP cannot substitute for the County's independent duty under CEQA to identify and require feasible avoidance, minimization and mitigation at the time of project approval. Many of the focused surveys, analyses and mitigation measures that CDFW recommended in its scoping comments are not reflected in the DEIR, and the Final EIR should incorporate them. We request that the Final EIR be supported by complete protocol-level surveys, include fully developed biological management plans and enforceable performance standards and adopt specific mitigation measures that are independent of any future CDFW permitting process.

M

Thank you once again for the opportunity to provide DEIR comments on the proposed Galaxy Solar PV and Storage Project and for considering our comments. We look forward to reviewing the Final EIR for the Project and requests notification when it is available. Please feel free to contact me with any questions.

Respectfully submitted,

Sophia Markowska
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Response to Comment Letter 11: Defenders of Wildlife and California Native Plant Society

11-A

The comment states that comments are submitted on behalf of Defenders of Wildlife (Defenders) and the California Native Plant Society (CNPS). This is an introductory comment and does not raise a substantive issue on the content of the Draft EIR analysis. No changes or modifications have been made to the Draft EIR in response to this comment, and no further response is required.

11-B

The comment states that the organizations strongly support the development of renewable energy production and believe that transitioning to a renewable energy future need not exacerbate the ongoing extinction crisis by thoughtfully planning projects while protecting habitat critical to species. The comment further describes the project and project location. The comment has been noted for the record, and revisions to the Draft EIR are not required.

11-C

The comment states that project objectives include maximizing existing transmission infrastructure, minimizing new disturbance, and designing the project in an environmentally responsible manner. The comment further states that undeveloped, or vacant, lands provide high-value habitat for special-status species and the project objectives should recognize that preferred sites minimize new disturbance and avoid high conservation value lands.

The project objectives emphasize project siting to minimize new disturbance and associated environmental impacts. As the CEQA lead agency, the County has broad discretion to incorporate applicant submitted project objectives, and the project objectives set forth in the EIR meet the requirements of CEQA such that no EIR changes or modifications are required in response to this comment. Further, the Draft EIR analyzes potential project impacts related to issues noted in the comment, including impacts on special-status species habitat, and identifies mitigation measures designed to reduce impacts on plant and wildlife habitat. The Draft EIR relies upon site-specific surveys and biological assessments prepared by professional biologists, including a Biological Resources Technical Report and associated special-status survey reports (**Appendices E1 through E7, E9 through E11** of the Draft EIR), and a Jurisdictional Delineation Report (**Appendix E8** of the Draft EIR). Biological resources evaluated in the Draft EIR include sensitive habitats, special-status plant and animal species, and potential wildlife movement corridors. As described in the Draft EIR, the potential for special-status species to occur on the project site is based on the results of database research, biological assessments, surveys conducted on the project site and vicinity, presence of suitable habitat, and the proximity of the project site to previously recorded occurrences in the CNDDB, CDFW, and USFWS data. Based on these comprehensive surveys and biological assessments, the Draft EIR evaluates project impacts to biological resources, including habitat quality, connectivity, and proximity to sensitive biological resources. **Mitigation Measures MM 4.1-1, MM 4.1-3, MM 4.1-6, MM 4.1-7, MM 4.3-3, MM 4.4-1** through **MM 4.4-23**, **MM 4.9-2, MM 4.10-1, MM 4.10-2, MM 4.13-1**, and **MM 4.14-1** are included in the Draft EIR to further reduce impacts on biological resources.

11-D

The comment states that the reliance of the avoidance, minimization and mitigation requirements set forth in an Incidental Take Permit (ITP) does not satisfy CEQA requirements. The comment states that mitigation

measures that require the applicant to comply with requirements from an ITP issued for the project from CDFW adopts no performance standards and identifies no specific action. The comment requests that the Final EIR adopt specific, enforceable avoidance, minimization and mitigation measures, including compensatory mitigation, for each significant biological impact, not including the issuance of an ITP. The comment specifically refers to **Mitigation Measures MM 4.4-8** (western Joshua tree), **MM 4.4-11** (western burrowing owl), **MM 4.4-13** (Swainson's hawk), and **MM 4.4-18** (Crotch's bumble bee).

The Draft EIR analyzes potential direct and indirect impact to each of these species based on multi-year survey work and technical reports for western Joshua tree, western burrowing owl, Swainson's hawk, Crotch's bumble bee, and other special-status resources, which the Draft EIR uses to support the species-specific mitigation framework. The Draft EIR adopts extensive project-specific avoidance, minimization, monitoring, and compensatory measures for the affected biological resources, including **Mitigation Measures MM 4.4-1** through **MM 4.4-3**, **MM 4.4-17** and **MM 4.1-3**, **MM 4.3-2, MM 4.3-3**, **MM 4.4-15**, **MM 4.9-2**, and **MM 4.13-1**. These measures require a Lead Biologist to oversee all biological mitigation measures; implementation of a Worker Environmental Awareness Training Program; general avoidance and protective measures designed to avoid impacts to special-status species during construction, operations and maintenance, and decommissioning activities; installing power lines per APLIC standards; implementing an Avian Mortality Monitoring Program; revegetation of temporarily disturbed areas and retention of natural vegetation on the project site where possible; a Landscape Revegetation and Restoration Plan; Fugitive Dust Control Plan; use of approved herbicides; and reducing noise levels associated with construction. As each of these species is protected under the California Endangered Species Act (CESA) as either listed or candidate species, the County also properly recognizes that CDFW take authorization would be required if take cannot be avoided, and that any ITP would include additional avoidance, minimization, and mitigation requirements in accordance with CESA. CDFW is subject to statutory requirements under the Fish and Game Code when issuing ITPs, including a requirement that any impacts be minimized and fully mitigated. When it is anticipated that a regulatory agency will impose its own mitigation requirements on a project, a lead agency may appropriately consider compliance with regulatory or permit requirements as mitigation. (*See, e.g.*, *Rialto Citizens for Responsible Growth v City of Rialto* (2012) 208 Cal.App.4th 899, 946 (mitigation measures for impacts to special status plant and wildlife species required formal consultation with U.S Fish and Wildlife Service regarding appropriate mitigation and permitting requirements). Further, as noted above, the County has imposed numerous other measures in addition to recognizing CDFW take authorization when making significance determinations.

Regarding the species-specific measures provided in the Draft EIR for western Joshua tree, Western burrowing owl, Swainson's hawk, and Crotch's bumble bee, each of the mitigation measures incorporates clear, objective, and industry-accepted performance standards that must be met by the project proponent, in accordance with the CEQA Guidelines. These measures also have been revised to clarify that when take is unavoidable as determined by the project's lead biologist, the project would be required to obtain an incidental take permit from CDFW for the species.

Western Joshua Tree (MM 4.4-8): Western Joshua trees are protected under the Western Joshua Tree Conservation Act (WJTCA) (Fish and Game Code § 1927 et seq.) and CESA. The WJTCA provides precise, non-discretionary fee structures, relocation standards, and seed collection mandates, and as noted above, CESA requires ITPs to fully mitigate impacts to protected species. Because impacts to western Joshua trees are expected as a result of project development, the Draft EIR determines that impacts to the species are potentially significant and, in addition to the extensive set of measures detailed above to avoid and minimize impacts to western Joshua trees, the Draft EIR imposes **Mitigation Measure MM 4.4-8**,

which requires the project to avoid western Joshua trees except to the extent authorized by an ITP, and to comply with all avoidance, minimization, and compensatory mitigation measures set forth in any ITP issued to the project by CDFW. It further requires the project to restore and enhance WJT habitat through relocation of a minimum of 900 onsite western Joshua tree stems to onsite or offsite lands, with a Post Western Joshua Tree Relocation Report required to document successful relocation. Minor revisions to **Mitigation Measure MM 4.4-8** are provided below and in the errata:

> **Mitigation Measure MM 4.4-8:** The project shall avoid western Joshua tree (WJT) individuals, if feasible except to the extent take is permitted by the California Department of Fish and Wildlife (CDFW). If avoidance of WJT is not feasible, as determined by the Lead Biologist, and p~~P~~rior to the issuance of grading permits, the project applicant shall consult with CDFW ~~regarding~~ and obtain an incidental take permit (ITP) for the take of WJT and shall comply with all avoidance, minimization, and compensatory mitigation measures, as set forth in any incidental take permit issued to the project by CDFW. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department.
>
> The project proponent shall also submit to the Kern County Planning and Natural Resources Department confirming documentation that the following has been implemented where take of WJT individuals cannot be avoided:
>
> a. Prior to the issuance of a grading permit, the project proponent/operator shall develop a Joshua Tree Preservation Plan or other similar plan as required by any incidental take permit issued to the project by CDFW. The Plan shall be prepared by the Lead Biologist(s) or their designee pre-approved by Kern County and shall be approved by the appropriate agencies, including Kern County, prior to implementation. At a minimum, the plan shall identify the methods utilized, as applicable, ~~that the project is taking~~ to comply with any California Endangered Species Act (CESA) or CDFW take requirements including relocation methods, monitoring and reporting, and compensatory mitigation related to the protection or mitigation of impacted Joshua trees. The Plan shall also clearly delineate how the project includes restoration and enhancements of WJT habitats through relocation of a minimum of 900 onsite WJT stems to approved onsite or offsite conserved lands.
>
> b. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department to be kept on file. ~~The Plan shall also clearly delineate how the project includes restoration and enhancements of WJT habitats through relocation of a minimum of 900 onsite WJT stems to onsite or offsite lands.~~
>
> c. Prior to final occupancy approval, a Post WJT Relocation Report shall be submitted to the Kern County Planning and Natural Resources Department documenting completion of WJT relocation.

Western Burrowing Owl (MM 4.4-11): Western burrowing owl is a candidate species and therefore protected under CESA. The Draft EIR explains that while potential burrows and occupied known burrows were located within the Study Area, no occupied nesting burrows, or evidence of breeding, have been observed within the Study Area. However, the Study Area contains suitable desert habitats, prey items, and perch sites to support burrowing owl foraging as well as burrows that could be used for overwintering or nesting burrowing owls, and that adverse direct or indirect impacts to western burrowing owls are potentially significant. In addition to the extensive set of measures detailed above to avoid and minimize impacts to burrowing owl, the Draft EIR imposes **Mitigation Measure MM 4.4-11**, which incorporates the detailed and objective survey and avoidance criteria set forth in the CDFG 2012 Staff Report on

Burrowing Owl Mitigation (CDFG 2012). It mandates pre-construction surveys and the implementation of no-disturbance avoidance buffers based on specific burrow classifications. If the species remains listed under the California Endangered Species Act (CESA) at the time of construction and take is determined to be unavoidable by the lead biologist, **Mitigation Measure MM 4.4-11** requires the project to obtain an ITP for the species. If the species is not listed under CESA, the 2012 Staff Report survey and buffer protections remain fully in force and are independently enforceable by the County. Minor revisions to **Mitigation Measure MM 4.4-11** are provided below and in the errata:

> **Mitigation Measure 4.4-11:** No more than 14 days prior to commencement of ground-disturbing activities, the Lead Biologist(s) or their designee shall conduct a pre-construction survey in areas with suitable western burrowing owl habitat proposed for disturbance within the project site and 500-meter buffer (where legally accessible) to determine if occupied known and/or occupied nesting western burrowing owl burrows are present. Burrowing owl burrows shall be evaluated and classified per the definitions below:
>
> > a. Potential Burrow: Any subterranean hole four inches or larger for which no current evidence is present to conclude that the burrow is being used by a burrowing owl.
> >
> > b. Occupied Known Burrow: A burrow that shows sign of burrowing owl presence (whitewash, feathers, pellets, prey remains, eggshell fragments) and presence of at least one burrowing owl. If monitoring confirms that burrowing owl are no longer using a burrow, it will be redesignated as potential.
> >
> > c. Occupied Nesting Burrow: A burrow where monitoring overseen by the Lead Biologist(s) or approved Biological Monitor demonstrates the presence of burrowing owl eggs, chicks, dependent young, and/or brooding or egg incubation (via inter burrow scope).
>
> Survey methodology shall be consistent with the methods outlined in the 2012 California Department of Fish and Game Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 7 to 20 meters apart, adjusting for vegetation height and density as needed, and noting burrows with fresh burrowing owl sign or presence of burrowing owl. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur prior to disturbance in specific areas of the site. The western burrowing owl surveys may be conducted in conjunction with other required preconstruction surveys, if timing is appropriate. Copies of the survey results shall be submitted to the Kern County Planning and Natural Resources Department.
>
> > a. If potential burrowing owl burrows are detected any time of year, burrows may be excavated under the direct supervision of the Lead Biologist without prior camera monitoring.
> >
> > b. If occupied known and/or occupied nesting burrowing owl burrows are detected, a no-disturbance buffer shall be established around the burrow and no ground-disturbing activities may occur within the buffer zone.
> >
> > c. An established burrowing owl burrow no-disturbance buffer may be removed once the burrowing owl(s) is/are no longer using the burrow (redesignated as a potential burrow).
>
> The size of employed no-disturbance buffers may be up to 500 meters from an occupied known and/or occupied nesting burrowing owl burrow year-round. Buffer size is dependent upon time of

year and level of construction activity disturbance. ~~Depending on the level of disturbance, a smaller buffer may be established by the Lead Biologist based on the visibility and sensitivity responses of each individual burrowing owl.~~ Ultimate buffer distances shall be determined in consultation with CDFW based on the visibility and sensitivity responses of each burrowing owl and as defined in the incidental take permit. Buffers shall be maintained for the duration the burrowing owl burrow remains occupied as determined by the Lead Biologist.

In October 2024, western burrowing owl was designated a candidate species under the CESA. If, at the commencement of project construction, western burrowing owl is present and is either still a candidate species, or has been listed as threatened, or endangered under CESA, and avoidance of occupied known and/or occupied nesting western burrowing owl burrows is infeasible as determined by the Lead Biologist, the Applicant shall ~~consult with the California Department of Fish and Wildlife (CDFW) regarding the potential for project construction activities to result in take of burrowing owl~~ obtain an incidental take permit (ITP) for western burrowing owl and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ~~Incidental Take Permit (~~ITP~~)~~ issued for the project by CDFW authorizing take of the species.

Swainson's Hawk (MM 4.4-13): Swainson's hawk is a listed species and protected under CESA. As provided in the Draft EIR, the Study Area contains suitable desert habitats, prey items, and perch sites to potentially support Swainson's hawks for foraging and/or migrating through; however, this species was not observed within the Study Area during the numerous field surveys conducted for the project. Furthermore, this species was not observed nesting within 5 miles of the project site during protocol level nest surveys conducted in 2023, 2024, and 2025. Direct impacts to Swainson's hawk could include reduction or loss of foraging habitat as a result of vegetation removal prior to grading and construction activities, although there is an abundance of suitable foraging habitat surrounding the project site. Further, the project has the potential to result in direct and indirect impacts on breeding Swainson's hawk, their nests, young, or eggs, if this species is nesting within 0.5 miles of the project footprint and project construction activities occur during their nesting season. Accordingly, in addition to the extensive set of measures detailed above to avoid and minimize impacts to Swainson's hawk, the Draft EIR imposes **Mitigation Measure MM 4.4-13**, which mandates nesting surveys within a 0.5-mile radius following CEC and CDFW Guidance during nesting season, as well as a 0.5-mile buffer around any nesting Swainson's hawks (CEC and CDFG 2010). Furthermore, it establishes a clear, quantifiable compensatory performance standard: mitigating the loss of foraging habitat within 5 miles of an active nest at a strict 0.5:1 ratio. Finally, if take of Swainson's hawk is determined to be unavoidable by the lead biologist, the measure requires the project to obtain an ITP and comply with all avoidance, minimization, and compensatory mitigation measures set forth in the ITP. **Mitigation Measure MM 4.4-13** is provided below for reference:

> **Mitigation Measure 4.4-13:** If construction activities are scheduled to be initiated during the Swainson's hawk nesting season (March 1 through September 15), the Lead Biologist(s) or their designee shall conduct a preconstruction survey of all accessible areas within 0.5 mile of the planned disturbance area to determine the presence and activity of known or new Swainson's hawk nests. Inaccessible areas shall be surveyed by binocular or spotting scope. The preconstruction survey shall occur within 30 days prior to the start of construction. If construction is scheduled to commence outside of the Swainson's hawk nesting season (September 16 to February 28), no preconstruction surveys are required. The preconstruction nest survey shall follow the protocols set out in the CEC and CDFW Guidance (2010).

To the extent feasible, the project proponent/operator shall design the project site to allow sufficient foraging and fledging area to maintain active Swainson's hawk nests located within 0.5 miles of the project site, if present.

If preconstruction surveys detect a nesting Swainson's hawk within 0.5 miles of the project site, a 0.5-mile avoidance buffer shall be established around the nest by the Lead Biologist(s) or approved Biological Monitor(s) and no construction within the buffer shall be allowed until the Lead Biologist(s) has determined the nest is no longer active. Encroachment into the buffer may occur at the discretion of the Lead Biologist(s) in consultation with the California Department of Fish and Wildlife (CDFW). If at the commencement of project construction, Swainson's hawk remain listed as a State threatened species, and if active Swainson's hawk nests are found within a 5-mile radius of the project site during preconstruction surveys, the project proponent/operator shall mitigate the loss of any moderate quality Swainson's hawk foraging habitat for any portion of the project site within 5 miles of an active nest at a ratio up to 0.5:1. Mitigation lands may be nested with other compensatory lands provided it meets the necessary biological requirements. Avoided habitat would not count toward impacts in determining compensatory mitigation requirements and may be used to satisfy mitigation requirements if protected by a deed restriction or other conservation mechanism/strategy.

If at the commencement of project construction, Swainson's hawk remain listed as a State threatened species, and if avoidance of an active nest is not feasible, the project proponent/operator shall consult with CDFW regarding the potential for project activities to result in take of the Swainson's hawk and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department.

Crotch's Bumble Bee (MM 4.4-18): Crotch's bumble bee is a candidate species and therefore protected under CESA. As provided in the Draft EIR, due to the commonality of habitat types and features (e.g., small mammal burrows) that the species can utilize for nesting and their diversity of foraging and nectar plants, Crotch's bumble bee habitat is considered widespread and in abundance in the project region and may occur in the Study Area. Though Crotch's bumble bee has not been confirmed present on the site to date, vegetation or ground-disturbing activities during project construction have the potential to result in direct and indirect impacts on this species if present in or near active construction areas. If Crotch's bumble bee is present, impacts on the species would be considered potentially significant. However, the project would be constructed using techniques that allow for retention and reestablishment of vegetation following project construction. Site preparation techniques would minimize impacts on natural vegetation where possible, using mow-and-roll vegetation clearance strategy, and minimizing conventional grading throughout the site to the maximum extent possible. Potential impacts on the species' habitat would be less than significant because of the abundance of suitable habitat surrounding the project site and because vegetation supporting the species would continue to be available on the site during project operations. In addition to the extensive set of measures detailed above to avoid and minimize impacts to Crotch's bumble bee, the Draft EIR imposes **MM 4.4-18**, which adopts immediate, objective standards, requiring nesting surveys in accordance with the CDFW 2023 Survey Considerations for CESA Candidate Bumble Bee (CDFW, 2023). Further, the measure establishes a 50-foot no-disturbance buffer around any active nest. Finally, if take of Crotch's bumble bee is determined to be unavoidable by the lead biologist, the measure requires the project to obtain an ITP and comply with all avoidance, minimization, and compensatory

mitigation measures set forth in the ITP. Minor revisions to **Mitigation Measure MM 4.4-18** are provided below and in the errata:

> **Mitigation Measure 4.4-18:** Preconstruction surveys for Crotch's bumble bee shall be conducted prior to initial ground disturbing activities. The survey area shall consist of suitable habitat areas within the project site and 50-foot buffer (access permitting). Surveys and timing would be consistent with the survey methodologies set out in the CDFW Survey Considerations for CESA Candidate Bumble Bee (CDFW, 2023) or as determined adequate for the project per coordination with the California Department of Fish and Wildlife (CDFW). The purpose of this survey will be to identify active Crotch's bumble bee nest colonies.
>
> a. If active Crotch's bumble bee nests are discovered onsite, the Lead Biologist(s) or approved Biological Monitor shall establish a 50-foot no disturbance buffer around the nest to reduce the risk of disturbance or accidental take.
>
> b. If establishment of a no disturbance buffer is feasible, construction activities shall not occur within the no disturbance buffer until the Lead Biologist(s) determines that the colony is no longer active (i.e., no Crotch's bumble bees are seen flying in or out of the nest for three consecutive days indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined inactive, construction activities within the no disturbance buffer(s) shall be allowed to resume.
>
> c. In June 2019, Crotch's bumble bee was designated a candidate species under the CESA. If, at the commencement of project construction, Crotch's bumble bee is present and is either still a candidate species, or has been listed as threatened, or endangered under CESA, and ~~If~~ avoidance of an active nest is not feasible, as determined by the Lead Biologist, the project proponent/operator shall ~~consult with CDFW regarding potential for project activities to result in~~ obtain an incidental take permit of the Crotch's bumble bee and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species. Documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department.

Accordingly, by combining immediate, mandatory pre-construction measures (surveys, buffers, biological monitoring, noise reduction, and Worker Environmental Awareness Program [WEAP] training) with a coordinated CESA permitting track, the Draft EIR provides a comprehensive, legally compliant, and protective biological mitigation framework.

10-E

The commenter is requesting that additional species-specific protocol surveys adhering to recommendations from the appropriate wildlife agency are conducted for burrowing owl, Crotch's bumble bee, and Mohave ground squirrel. The comment states that protocol-level surveys are required for the Draft EIR to reliably determine whether special-status species are present, where they occur within the project site, and how the project would impact each species.

CEQA requires that an EIR be supported by substantial evidence and a reasonable, good-faith effort at disclosure and analysis. An EIR should be prepared with sufficient degree of analysis to provide decision-makers with information that enables them to make a decision which intelligently takes account of

environmental consequences (CEQA Guidelines Section 15151.) CEQA does not require a lead agency to conduct every survey or protocol recommended by a commenter or even by a reviewing agency where the existing record contains sufficient site-specific information to support the environmental analysis. Protocol level surveys are not required to be conducted to support an EIR's analysis of biological resource impacts. *See, e.g., Association of Irritated Residents v County of Madera* (2003) 107 Cal.App.4th 1383, 1397 (biological survey is substantial evidence supporting EIR and protocol surveys not required). Here, the Draft EIR relies on literature review, database review, habitat assessments, species-specific field surveys where appropriate, and conservative mitigation measures tailored to each species' known or potential occurrence within the Study Area.

As described in Draft EIR **Section 4.4***, Biological Resources*, prior to conducting surveys for the project, literature reviews and database analyses were completed. The literature review included available information in relevant literature, databases, agency web sites, reports and management plans, geographic information system (GIS) data, maps, and aerial imagery. Resources reviewed included U.S. Geological Survey (USGS) 7.5-minute topographic maps; the CDFW California Natural Diversity Database (CNDDB); the United States Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) system; the California Native Plant Society's Electronic Inventory of Rare and Endangered Plants of California; Kern County's General Plan, ordinances, and municipal codes; CDFW's Biogeographic and Information Observation System (BIOS); USFWS' Critical Habitat online mapper; USFWS' National Wetlands Inventory (NWI) database and Wetlands Mapper; USGS National Hydrographic Dataset (NHD) maps; CDFW's BIOS Habitat Connectivity Viewer; and Audubon California's Important Bird Areas interactive site map.

Multiple field surveys were conducted for the project between 2023 and 2026. The surveys and associated technical reports are included below:

- Botanical field surveys were conducted between May 15 to May 26, 2023, June 6 to 21, 2023, April 29 to May 9, 2024. Detailed findings are documented in the *Botanical Inventory Report, Galaxy Solar PV & Storage Project, Kern County, California* included as **Appendix E2** of the Draft EIR.

- Between October 2023 and April 2024, a DETO habitat suitability assessment and protocol presence/absence survey was conducted within the 3,889-acre Study Area. The methods and results of the survey are included in the *Mojave Desert Tortoise Survey Report, Galaxy Solar PV & Storage Project, Kern County, California* included as **Appendix E3** of the Draft EIR. Additionally, protocol-level surveys for desert tortoise (*Gopherus agassizii*) were conducted by Tetra Tech in the spring of 2026.

- Between May 2023 and April 2024, a burrowing owl habitat assessment and burrow survey was conducted within the 3,889-acre Study Area. The methods and results of the survey are included the *Burrowing Owl Survey Report, Galaxy Solar PV & Storage Project, Kern County, California* included as **Appendix E4** of the Draft EIR.

- Between May 2023 and April 2024, a habitat assessment and burrow survey was conducted for desert kit fox within the 3,889-acre Study Area. The methods and results of the survey are included in the *Desert Kit Fox Survey Report, Galaxy Solar PV & Storage Project, Kern County, California* included as **Appendix E5** of the Draft EIR.

- Between April and July of 2023, June 2024, and April and July 2025, protocol-level Swainson's hawk surveys were conducted within the Project site and proposed gen-tie line and a 5-mile radius. The methods and results of the survey are included in the *Swainson's Hawk (Buteo swainsoni) and Nesting Raptor Survey Report* included as **Appendix E6** of the Draft EIR.
- In April and May 2023, biologists conducted golden eagle protocol surveys within the project site and proposed gen-tie line and a 2-mile radius. Visual surveys for the presence of condors were conducted simultaneously. Results are documented in the *Golden Eagle (Aquila chrysaetos) and California Condor (Gymnogyps californianus) Analysis of Use, Galaxy Solar PV & Storage Project* included as **Appendix E7** of the Draft EIR.
- In March and May 2024, a habitat suitability assessment was conducted for Mohave ground squirrel within a 3,889-acre Study Area. Results are documented in the *Mohave Ground Squirrel Habitat Assessment, Galaxy Solar PV & Storage Project* included as **Appendix E9** of the Draft EIR.
- Detailed western Joshua tree (WJT) surveys were conducted for the project. Results are documented in the *Western Joshua Tree Population Characterization and Woodland Mapping – Galaxy Solar PV & Storage Project* included as **Appendix E11** of the Draft EIR

As described in the sections below, the EIR's environmental baseline was based on substantial evidence in the form of biological surveys and site-specific habitat assessments related to species identified in the comment, and no additional protocol level surveys are required to satisfy the requirements of CEQA. No revisions to the Draft EIR or additional mitigation measures are required.

Burrowing Owl

With specific regard to western burrowing owl, **Section 4.4***, Biological Resources* of the Draft EIR, and **Appendix E4** describe how between May 2023 and September 2025, biologists conducted a habitat assessment and burrow survey for western burrowing owl within the Study Area in accordance with the California Department of Fish and Game's *Staff Report on Burrowing Owl Mitigation* (2012). The survey mapped potential burrows, recorded observed owl sign and live individuals, and identified occupied known burrows within the Study Area. The Draft EIR therefore was not limited to a general habitat screening; it relied on species-specific field investigation sufficient to establish the baseline.

During western burrowing owl surveys, 70 potential burrows were mapped within the Study Area, of which 60 were located within the project site. Thirteen occupied known burrows with live individuals were observed in the Study Area, of which 10 were located in the project site. No occupied nesting burrows, or evidence of breeding, were observed within the Study Area. Burrows that are of sufficient size and correct shape can be used by burrowing owl and/or desert kit fox. At some burrows and dens, evidence of use by more than one species was observed. In addition, the Study Area provides suitable foraging habitat for western burrowing owls.

The Draft EIR discusses that while impacts to western burrowing owls are potentially significant, impacts would be reduced through implementation of **Mitigation Measure MM 4.4-11,** which requires pre-construction surveys to locate occupied burrowing owl burrows within the project site and 500-foot buffer (where legally accessible). Pre-construction surveys would be consistent with the methods outlined in the 2012 CDFG Staff Report. If occupied known and/or occupied burrows are detected, a no-disturbance avoidance buffer would be implemented for the duration the burrow remains occupied. If take is unavoidable as determined by the lead biologist, the project would be required to obtain an ITP for western

burrowing owl and will comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species. In addition, the project would implement **Mitigation Measures MM 4.4-1** through **MM 4.4-3**, **MM 4.4 16**, **MM 4.4-17** and **MM 4.1-3**, **MM 4.3-2, MM 4.3-3**, **MM 4.9-2**, and **MM 4.13-1**. These measures require a Lead Biologist to oversee all biological mitigation measures; implementation of a Worker Environmental Awareness Training Program; general avoidance and protective measures designed to avoid impacts to special-status species during construction, operations and maintenance, and decommissioning activities; installing power lines per APLIC standards; and implementing an Avian Mortality Monitoring Program; a Landscape Revegetation and Restoration Plan; Fugitive Dust Control Plan; use of approved herbicides; and reducing noise levels associated with construction which will further reduce potential impacts to burrowing owl. With implementation of these mitigation measures, impacts to western burrowing owl would be less than significant.

Mohave Ground Squirrel

The Draft EIR also provides a reasonable, site-specific basis for its analysis of Mohave ground squirrel. In March and May 2024, a habitat suitability assessment was completed within the Study Area. The habitat suitability assessment was performed reviewing vegetation mapping and soils data and performing a site visit by driving existing roads and walking within the Study Area to assess the habitat for its suitability to support Mohave ground squirrel. Overall, approximately 43 percent of the Study Area was documented as moderate quality habitat, 55 percent of the Study Area was documented as low/moderate quality habitat, and 2 percent of the Study Area was documented as unsuitable. No highly suitable habitat is present in the Study Area. That assessment, together with the observed habitat conditions and recent occurrence information, supports the Draft EIR's conclusion that the Study Area is largely dominated by allscale scrub and does not provide suitable reproductive habitat for a substantial resident population of Mohave ground squirrel. No Mohave ground squirrel individuals were observed during field surveys. The Draft EIR therefore does not assume the species is absent; rather, it evaluates the species deductively based on the available site data and the known ecological conditions of the project site.

While it is unlikely that the Study Area would support a substantial resident reproductive population, the Study Area may support juvenile dispersal and temporary occupation. Therefore, the Draft EIR concludes that potential impacts to Mohave ground squirrel would be less than significant with implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-3** and **MM 4.4-9**, which include lead biologist oversight, Worker Environmental Awareness Training, general avoidance and protective measures, and preconstruction surveys for special-status wildlife prior to disturbance.

Crotch's Bumble Bee

The Draft EIR likewise provides a sufficient basis for its treatment of Crotch's bumble bee. The record reflects that the species has been documented in the broader region, that the Study Area contains habitat features that may support foraging and nesting, and that the Draft EIR therefore conservatively addresses Crotch's bumble bee as a potentially present special-status species. The Draft EIR also discusses previous documentations from nearby studies, including 2024 Crotch's bumble bee surveys conducted for another project in the region, during which one Crotch's bumble bee individual was found approximately 1 mile north of the Study Area. Accordingly, though Crotch's bumble bee has not been confirmed present on the site to date, vegetation or ground-disturbing activities during project construction have the potential to result in direct and indirect impacts on this species if present in or near active construction areas. If Crotch's bumble bee is present, impacts on the species would be considered potentially significant. Accordingly,

Mitigation Measure MM 4.4-18 requires a Lead Biologist or designee to conduct nesting surveys in suitable habitat prior to initial ground disturbance, consistent with CDFW's *Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species* (2023) and requires a minimum 50-foot disturbance buffer around any active nest.

If avoidance of an active nest is not feasible, **Mitigation Measure MM 4.4-18** requires construction activities in the immediate area to be halted until the nest is inactive or, if take is unavoidable as determined by the lead biologist, the project would be required to obtain an ITP from CDFW and comply with any applicable avoidance, minimization, and compensatory mitigation requirements. In addition, the project would be constructed using techniques that allow for retention and reestablishment of vegetation following project construction. Site preparation techniques would minimize impacts on natural vegetation where possible, using mow-and-roll vegetation clearance strategy, and minimizing conventional grading throughout the site to the maximum extent possible. Potential impacts on the species' habitat would be less than significant because of the abundance of suitable habitat surrounding the project site and because vegetation supporting the species would continue to be available on the site during project operations. Potential impact on Crotch's bumble bee habitat would be further minimized through implementation of **Mitigation Measure MM 4.4-15**, which requires revegetation of temporarily disturbed areas and calls for retention of natural vegetation on the project site where possible. In addition, the project proponent/operator will implement **Mitigation Measures MM 4.4-1** through **MM 4.4-3** which require a Lead Biologist to oversee all biological mitigation measures, implementation of a Worker Environmental Awareness Training Program, and general avoidance and protective measures designed to avoid impacts to special status species during construction, operations and maintenance, and decommissioning activities. Lastly, the project proponent/operator will implement **Mitigation Measures MM 4.1-3**, **MM 4.3-2, MM 4.3-3**, and **MM 4.9-2**, which require a Landscape Revegetation and Restoration Plan, Fugitive Dust Control Plan, and use of approved herbicides. With implementation of **Mitigation Measures MM 4.4-18**, **MM 4.4-15**, **MM 4.4-1** through **MM 4.4-3**, **MM 4.1-3**, **MM 4.3-3**, and **MM 4.9-2**, impacts to the Crotch's bumble bee would be less than significant.

11-F

The comment describes how certain biological management plans, such as the Joshua Tree Preservation Plan (**Mitigation Measure MM 4.4-8**), the Raven Management Plan (**Mitigation Measure MM 4.4-14**), the Avian Mortality Monitoring Program (**Mitigation Measure MM 4.4-17**) and the Weed Control Plan (**Mitigation Measure MM 4.4-21**) have been deferred to be developed at a future date. A Mohave Ground Squirrel Avoidance and Monitoring Plan similarly has not yet been prepared.

The comment specifies that while CEQA Guidelines §15126.4(a)(1)(B) allows the deferral of the specifics of mitigation in narrow circumstances, it requires the lead agency to adopt specific, measurable performance standards and to identify the types of actions that can feasibly achieve those standards. The comment requests that the Final EIR include fully developed biological management plans or, at the minimum, specific and measurable performance standards for each plan sufficient to allow the public and decision-makers to evaluate their adequacy.

As described in CEQA Guidelines Section 15126.4(a)(1)(B), mitigation plans need not be included in an EIR, and specific details of mitigation may be developed after project approval "provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure." (See also *Save Our Capital! v. Dept. Of General Svcs.* (2023) 87 Cal. App. 5th 655, 687-88 upholding mitigation measures

calling for future preparation of plans and explaining that "CEQA, however, authorizes relying on a future plan as a mitigation measure so long as the lead agency commits itself to the mitigation, adopts specific performance standards the mitigation will achieve, and identifies the types of potential actions that could feasibly achieve that performance standard.") **Mitigation Measures MM 4.4-8**, **MM 4.4-14**, **MM 4.4-17**, and **MM 4.4-21** require implementation of specific avoidance, minimization, monitoring, and, where applicable, compensatory actions before or during project construction; the fact that some plan-level details will be finalized closer to implementation does not render the mitigation measures inadequate or deferred. CEQA permits deferral of detailed implementation mechanics where, as here, the EIR establishes specific performance objectives and identifies the types of actions that will achieve them.

The Western Joshua Tree Preservation Plan associated with **Mitigation Measure MM 4.4-8** is grounded in the WJTCA and the Draft EIR's specific requirements for tree avoidance, relocation, seed collection, and compensatory mitigation, including the requirement to obtain an ITP if take is unavoidable and comply with any applicable authorization terms. See further discussion in **Response to Comment 10-D**, above. The Raven Management Plan in **Mitigation Measure MM 4.4-14** must be developed consistent with U.S. Fish and Wildlife Service guidance and includes specific measures intended to reduce the potential for effects to burrowing owl and desert tortoise. It is similarly tied to a concrete objective: to avoid or minimize impacts to nesting ravens through preconstruction surveys, buffers, and monitoring requirements, with implementation to be refined prior to disturbance in a manner consistent with those standards. The Avian Mortality Monitoring Program in **Mitigation Measure MM 4.4-17** must follow the U.S. Geological Survey's *Mortality Monitoring Design for Utility-Scale Solar Power Facilities* to systematically and periodically evaluate avian mortality associated with the solar facility and, if warranted, implement adaptive management measures, including corrective measures if warranted. The Weed Control Plan in **Mitigation Measure MM 4.4-21** is likewise governed by concrete performance standards and actions, including cleaning equipment tires, using weed-free mulch, and other measures to prevent the spread of invasive weeds during construction, operation, and maintenance. Finally, the Mohave Ground Squirrel Avoidance and Monitoring Plan would be implemented, if needed, as an operational tool to carry out the Draft EIR's existing mitigation framework for Mohave ground squirrel, which already includes lead biologist oversight, worker training, general protective measures, and preconstruction surveys.

In each case, the Draft EIR does not leave the substance of the mitigation measure to future discretion; rather, it identifies the required environmental outcome now and reserves only technical details of implementation for preparation prior to the relevant project activity. Accordingly, the Draft EIR provides sufficient information for the public and decision-makers to evaluate the adequacy of the mitigation program. No revisions to the Draft EIR or additional mitigation measures are required.

11-G

The comment summarizes the western Joshua tree mapping that is described in **Section 4.4***, Biological Resources* and **Appendix E11** of the Draft EIR. The comment states that **Mitigation Measure MM 4.4-8** defers mitigation for Western Joshua tree impacts and does not establish defined survival thresholds, a minimum monitoring period, annual reporting requirements or adaptive management triggers for relocated trees. The comment also requests that mitigation lands must be held in perpetuity by a qualified conservation organization as defined by the CA Civil Code 815.3. The comment requests compensatory mitigation, enforceable performance standards that includes defined survival thresholds, a minimum monitoring period, annual reporting requirements and adaptive management.

The project includes a number of design features to avoid, preserve, and minimize impacts to western Joshua trees:

- The project includes restoration and enhancements of Western Joshua tree habitats through relocation of a minimum of 900 onsite Western Joshua tree stems to onsite or offsite lands; and
- The project proponent intends to obtain take coverage from CDFW for impacts to WJTs and, prior to the issuance of grading or building permits, documentation of take authorizations will be provided to Kern County (**Mitigation Measure MM 4.4-8**). Mitigation for impacts to Western Joshua tree would be coordinated with CDFW through take coverage permitting and is expected to include measures such as seed collection, Western Joshua tree relocation requirements, and the acquisition of offsite compensatory mitigation lands with a focus on Western Joshua tree refugia habitat. **Mitigation Measure 4.4-8** requires the project proponent/operator to demonstrate that take authorization and mitigation has been approved by CDFW prior to issuance of a grading permit that would result in take of western Joshua tree. **Mitigation Measure 4.4-8** further requires preparation of a Joshua Tree Preservation Plan and a Post Western Joshua Tree Relocation Report.

In addition, the project proponent/operator would implement **Mitigation Measures MM 4.4-1** through **MM 4.4-3**, which require a Lead Biologist to oversee all biological mitigation measures, implementation of a Worker Environmental Awareness Training Program, and general avoidance and protective measures to avoid impacts to special-status species, including western Joshua tree, during construction, operations and maintenance.

Take coverage from CDFW for Western Joshua tree is expected to require minimum monitoring periods, annual reporting requirements, and adaptive management triggers for translocated Western Joshua tree to the satisfaction of CDFW prior to issuance of any incidental take permit issued for the project authorizing take of the species. Project mitigation measures will be structured to ensure impacts to the species occurring during the project's life would be mitigated. CDFW is subject to statutory requirements under the Fish and Game Code when issuing ITPs, including a requirement that any impacts be minimized and fully mitigated. **See also Response to Comment 11-D**, above, regarding take permitting for western Joshua trees.

Further, the Draft EIR anticipates that the incidental take permit may require acquisition of offsite compensatory mitigation lands with a focus on WJT refugia habitat which would be protected for the life of the project and would provide habitat to western Joshua tree. Additional protections for these areas will be established during the project's consultation with CDFW. Project mitigation measures will be structured to ensure impacts to the species occurring during the project's life would be mitigated.

While implementation of project design features and mitigation measures would reduce impacts to western Joshua tree, the Draft EIR considers impacts to Western Joshua tree to be significant and unavoidable due to the number of western Joshua tree that would be impacted to implement the project. The Draft EIR proposes measures to mitigate impacts to western Joshua trees to the extent feasible and adequately discloses the impacts to western Joshua trees. No revisions to the Draft EIR or additional mitigation measures are required.

11-H

The comment recommends that **Mitigation Measure MM 4.4-11** be revised to incorporate a table of burrowing owl avoidance buffers that specifies buffer radii based on the time of year and level of disturbance and that reductions in buffer distances be approved by CDFW.

Please see the **Response to Comments 11-D and 11-E** for additional information regarding western burrowing owl. The size of employed no-disturbance buffers included in **Mitigation Measure MM 4.4-11** may be up to 500 meters from an occupied known and/or occupied nesting burrowing owl burrow year-round. As described in **Mitigation Measure MM 4.4-11**, buffer size would be dependent upon time of year and level of construction activity disturbance. Consistent with the burrowing owl avoidance buffers in the table included in the comment, and guidance in the CDFG 2012 *Staff Report on Burrowing Owl Mitigation*, depending on the level of disturbance, existing vegetation, land uses in the area, and similar, a smaller buffer may be established by the Lead Biologist based on the visibility and monitoring of the sensitivity responses of each individual burrowing owl.

The Draft EIR further explains that if, at the commencement of project construction, western burrowing owl is present and is either still a candidate species, or has been listed as threatened or endangered under CESA, and take is unavoidable, the Applicant shall consult with CDFW regarding the potential for project construction activities to result in take of western burrowing owl and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species, consistent with the commenters request to consult with CDFW. In combination, these requirements ensure that impacts to burrowing owls will be adequately mitigated, and no revisions to the Draft EIR or additional mitigation measures are required.

11-I

The comment states that compensation for Swainson's hawk foraging habitat within 5 miles of an active nest should be mitigated at a minimum of a 2:1 ratio per CDFW recommendations to prevent a net loss of foraging habitat.

Swainson's hawk were not observed within the Study Area during the numerous field surveys conducted from 2023 through 2025 and this species was not observed nesting within 5 miles of the Project site during protocol level nest surveys conducted in 2023, 2024, and 2025. While this species was not observed on the project site, remanent stands of western Joshua trees provide suitable nesting habitat, and desert lands within the 5-mile buffer largely consist of potential Swainson's hawk foraging habitat, with the exception of developed areas, as described in **Appendix D6** to the Draft EIR. Direct impacts to Swainson's hawk could include reduction or loss of foraging habitat as a result of vegetation removal prior to grading and construction activities. However, while availability of potential foraging habitat would be reduced or lost during construction, there is an abundance of suitable foraging habitat surrounding the project site.

Under CEQA, mitigation is required whenever a project may result in a significant impact to the environment. Where feasible, the impacts should be mitigated such that remaining impacts are less than significant. Per the CDFW Five-Year Status Review for Swainson's Hawk (*Buteo swainsoni*), prepared in 2016, four different studies documented average home ranges of 1,001 to 9,979 acres for nesting Swainson's hawks in the Central Valley (CDFW 2016). These home ranges are equivalent to circles with radii of 0.71 to 2.23 miles, as described in the Swainson's Hawk Home Range and Habitat Literature Review for the Buttonbush Solar and Storage Project in Appendix O.7 of the Final EIR. In addition, a recent study of four utility-scale solar energy facilities in the Central Valley found that Swainson's hawks foraged within the solar arrays and that solar arrays were favored over some types of agricultural use (Estep 2021). Specifically, Estep's analysis found that compared to their availability in the landscape, solar arrays, alfalfa, tilled, and wheat fields were all used more often than expected, and ruderal/developed, orchard, grassland, and idle/fallow habitats were used less often than expected. Thus, conversion of agricultural lands to solar

energy facilities does not result in the complete loss of foraging habitat, and it is expected that Swainson's hawk will continue to use the project area for foraging during project operations.

Based on the information from these studies of home range size and use of solar energy facilities, the proposed project may result in a minor reduction in Swainson's hawk foraging opportunities; however, there are no high-value foraging habitats on the project site.

Although there is an abundance of suitable foraging habitat in the area surrounding the project site, the EIR considers impacts to Swainson's hawk foraging habitat as potentially significant. Accordingly, if at the commencement of project construction, Swainson's hawk remain listed as a state threatened species, and if active Swainson's hawk nests are found within a 5-mile radius of the project site during preconstruction surveys, the project proponent/operator would be required to mitigate the loss of any moderate quality Swainson's hawk foraging habitat for any portion of the project site within 5-miles of an active nest at a 0.5:1 ratio in accordance with **Mitigation Measure MM 4.4-13**, which would reduce impacts on foraging habitat to less than significant. A reduced ratio is appropriate given the low to moderate quality habitat on the project site and newer information demonstrating that Swainson's hawk may continue to use the project site for foraging. This ratio also is consistent with other recently approved solar project mitigation measures in Kern County and the Antelope Valley. No revisions to the Draft EIR or additional mitigation measures are required.

11-J

The comment requests that any coordination with the BLM be documented. The comment also requests an analysis of the project's potential edge effects on adjacent BLM-managed lands.

In response, two (2) offices for the Bureau of Land Management were sent copies of the Notice of Availability, as indicated in the mailing list at the front of the Draft EIR. Staff has not received any response from the BLM. The Draft EIR acknowledges that BLM-managed lands are located adjacent to the project site and evaluates the project's potential biological resource impacts, including impacts to habitat connectivity and wildlife movement through the project site and surrounding undeveloped lands. The analysis in the Draft EIR relies on CDFW Essential Connectivity Area and Natural Landscape Block data and concludes that impacts to designated wildlife corridors or identified essential regional wildlife linkages would not occur. In addition, the Draft EIR explains that any effects on wildlife and wildlife movement within or adjacent to the project work areas would be greatest during construction, but would be temporary in nature and would be expected to stabilize following completion of construction. The Draft EIR further notes that the surrounding desert habitat would remain available for wildlife movement after project development.

To further minimize potential effects on wildlife movement, the project incorporates wildlife-permeable perimeter fencing intended to maintain connectivity and allow wildlife movement through the project site and adjacent habitat areas, including lands managed by BLM.

Based on the environmental analysis contained in the Draft EIR, no substantial evidence has been provided demonstrating that the project would result in significant adverse effects to BLM-managed lands or create potential edge effects beyond those already analyzed. CEQA requires evaluation of a project's potential environmental effects, including off-site effects were supported by substantial evidence; however, it does not require separate analysis of adjacent lands solely based on ownership or jurisdictional boundaries. Accordingly, no revisions to the Draft EIR or additional mitigation measures are required.

11-K

The comment recommends the following updates to the biological mitigation measures: **Mitigation Measure MM 4.4-2** should provide the Worker Environmental Awareness Training Program in all languages spoken by on-site personnel; **Mitigation Measure MM 4.4-3(b)** should revise language from construction-related activities outside of the impact zone "shall be avoided" to "shall be prohibited"; and **Mitigation Measure MM 4.4-3(j)** should minimize or avoid nighttime construction work as daytime work is preferable to reducing impacts to wildlife. Additionally, the comment notes that relative impacts of overhead versus underground collection systems on ground-dwelling species should be analyzed further and how the collection system siting and design will avoid and minimize impacts to species.

The Draft EIR incorporates mitigation measures that address the concerns raised in the comment, and additional revisions are not required. Regarding **Mitigation Measure MM 4.4-2** requiring Worker Environmental Awareness Training, it is a standard practice for all worker trainings, including safety, environmental, and other trainings, to be conducted such that all workers can understand and benefit from the content. No change to **Mitigation Measure MM 4.4-2** is required.

Regarding **Mitigation Measure MM 4.4-3(b)**, the existing phrase "shall be avoided" is consistent with the measure's protective purpose and does not need to be changed to "shall be prohibited."

The Draft EIR also addresses nighttime work through the reduced nighttime speed limit and the other protective measures in **Mitigation Measure MM 4.4-3**, and further limiting nighttime work is not necessary to support the biological conclusions in the draft EIR.

With regard to collection systems, **Chapter 3.0**, *Project Description*, states that the solar panels would be electrically connected to each other via both aboveground and underground wiring, and that the MV collector lines would be routed underground or aboveground to an onsite collector substation. Both underground and aboveground wiring and collector lines are contemplated and fully analyzed in the Draft EIR. The Draft EIR's biological analysis and mitigation framework apply to the entire project and measures that require Lead Biologist oversight, preconstruction surveys, species-specific buffers, wildlife exclusion measures, and general disturbance-minimization requirements that would apply to any collection system design regardless of it being overhead or underground. For desert tortoise and desert kit fox, the Draft EIR includes the relevant survey and avoidance measures, and additional overhead-versus-underground analysis is not required to support the Draft EIR's conclusions.

No changes to the Draft EIR are required.

11-L

The comment states that mitigation for alkali mariposa lily should be developed before project approval and included in the Final EIR. The comment emphasizes that on-site preservation should be prioritized over compensatory mitigation, and any seed collection, bulb salvage, nursery propagation, translocation, or reintroduction efforts must be carefully planned with performance standards and monitoring. The comment also calls for an offsite conservation area with a suitable habitat occupied by alkali mariposa lilies to achieve a 2:1 ratio of suitable occupied habitat to habitat impact by the project. If a 2:1 ratio is not possible, the project should reintroduce salvaged plants on disturbed portions of the site while maintaining no net loss of individuals throughout the life of the project. The comment requests that transplanted individuals shall be monitored and managed each year for five years after planting. After the initial five-year monitoring period, the comment requests that the project continue annual monitoring for three more years, shift to every three-year monitoring if performance standards are met without management, and return to active

management plus renewed annual monitoring whenever standards are not met, including additional seed collection if needed to meet those standards. The comment states that alkali mariposa lilies not directly impacted by project activities but within the project footprint should be monitored throughout the life of the project. Active management should include invasive species control, seed collection, seed bulking, and seed distribution.

The Draft EIR reflects the statement in the comment that in-situ preservation of onsite populations is biologically superior to high-risk translocation or salvage efforts. In alignment with this priority, the project is designed to allow alkali mariposa lilies to persist in-situ. Over 87 percent of the mapped population lies within temporary impact areas (such as beneath solar panels). Because solar panels are elevated and do not create a continuous impermeable barrier, and because vegetation management will rely on mowing rather than grading or clearing, the native soil, hydrology, and seed bank will remain intact. The species' specialized seed bank is adapted to remain dormant during dry years and germinate in wetter years, ensuring its long-term persistence within the solar field throughout project operations. To protect avoided on-site populations from indirect construction and operation impacts, the project will implement **Mitigation Measure MM 4.3-2** (Fugitive Dust Control Plan), **Mitigation Measure MM 4.4-21** (Weed Control Plan), and **Mitigation Measure MM 4.9-2** (strict restrictions on herbicide use).

Mitigation Measure MM 4.4-6 has been revised as follows:

MM 4.4-6: Alkali mariposa lily, a rare plant species with a California Native Plant Society rank of 1.B2 was documented as present on the project site. If the project would eliminate more than 10 percent of the local population, a Habitat Mitigation Plan would be prepared and would include the following:

a. A figure illustrating the area of the population to be preserved, and the area of the population to be removed;

b. Identification of on-site or off-site preservation, restoration, or enhancement location(s) and avoidance of those locations through the establishment of preservation areas and/or buffers;

c. Methods for preservation, restoration, enhancement, and/or population translocation;

d. A replacement ratio ~~and success standard criteria~~of 1:1 for occupied habitat or an alternative equivalent mitigation in coordination with the C~~c~~ounty;

e. A five-year monitoring program to ensure mitigation success in accordance with the following survivorship percentage performance standard:

    i. Because the plant lives above-ground during only a portion of its lifecycle, a minimum of 90 percent survival during one or more of the monitoring periods shall be considered success for this species.

f. Adaptive management and remedial measures in the event that performance standards are not achieved; and

g. Financial assurances and a mechanism for conservation of any mitigation lands required in perpetuity.

A 1:1 mitigation ratio for occupied habitat is considered sufficient because alkali mariposa lily is not federally or state listed as threatened or endangered and is relatively common in the project area. Copies of

all surveys and reports shall be submitted to the Kern County Planning and Community Development Department.

Potential impacts to alkali mariposa lily would be reduced through implementation of **Mitigation Measures MM 4.4-5**, which require conducting pre-construction surveys for special-status plants, and **MM 4.4-6**. Given that permanent impacts only represent approximately 3.7 percent of the point-mapped population and 3.9 percent of the polygon-mapped population is to be low and localized, and impacts to alkali mariposa lily would be well below the 10 percent threshold identified in **Mitigation Measure MM 4.4-6**. Nonetheless, with implementation of **Mitigation Measures MM 4.4-5** and **MM 4.4-6**, impacts to alkali mariposa lily would be reduced to less than significant.

Mitigation Measure MM 4.4-6 includes appropriate performance standards and implementation actions to address impacts should permanent impacts exceed the 10 percent threshold. The measure requires development of a HMP if the 10 percent threshold is triggered. The measure explicitly requires that the HMP contains identification of on-site or off-site preservation, restoration, or enhancement location(s), methods for translocating populations, a 1:1 mitigation ratio for occupied habitat, a 5-year monitoring program to verify mitigation success, remedial measures and adaptive management actions to be taken if performance standards are not met, and financial assurances and a mechanism for conservation of any mitigation lands required in perpetuity.

Finalizing operational details such as preemptively working with a nursery to propagate the species prior to EIR approval is not appropriate given the analysis in the document and the expectation of impacts to the local population. Precise construction timelines, final engineering layouts, and updated pre-construction survey counts, which fluctuate based on seasonal rainfall, are necessary to develop the HMP (if required). **Mitigation Measure MM 4.4-6** ensures that any required mitigation is tailored to real-time, site-specific conditions while maintaining strict performance standards.

In the event that the 10 percent threshold is triggered and salvage becomes necessary, the HMP would outline specific collection, salvage, and transplant protocols in coordination with Kern County. This collaborative process ensures that any salvage efforts utilize the most up-to-date scientific methods and are adapted to the specific conditions of the local population.

Regarding hydrological and runoff impacts, solar arrays do not create solid, continuous, impermeable barriers. Rainwater falling on panels will shed directly onto the pervious soils beneath the arrays, maintaining local soil moisture and infiltration. To prevent changes in local hydrology, **Mitigation Measure MM 4.10-2** (Final Drainage Plan) requires the project to maintain pre-construction drainage patterns, topography, and flows to the maximum extent feasible. This ensures that the hydrological regime supporting the alkali mariposa lily on-site is preserved during project operations.

The Draft EIR proposes measures to minimize and mitigate potential impacts to alkali mariposa lily to the extent feasible and adequately discloses the potential impacts to alkali mariposa lily. No revisions to the Draft EIR or additional mitigation measures are required.

11-M

The comment is conclusionary and has been noted for the record; no revisions to the Draft EIR are necessary. The County thanks the author for their comments and participation in the public review of the environmental document.

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Appendix N
Revised Project Design--Additional Environmental Information

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TETRA TECH

Memo

To: Galaxy Solar Storage, LLC
4275 Executive Square, La Jolla, CA 92137

Date: June 3, 2026

Subject: Revised Project Design – Additional Environmental Information
Galaxy Solar PV & Storage Project, Kern County, California

Tetra Tech, Inc. (Tetra Tech) has prepared this memorandum for the Galaxy Solar PV & Storage Project (Project) in Kern County, California. The Revised Project, as assessed in the Final Environmental Impact Report (EIR), consists of a revised Project design of an approximately 600-megawatt (MW) photovoltaic (PV) solar facility, which may include up to 4 gigawatt-hours (GWh) of energy storage capacity, on an approximately 3,519-acre Project site. The Prior Project, as assessed in the Draft EIR, includes an approximately 600-MW PV solar facility, which may include up to 4 GWh of energy storage capacity, on an approximately 3,400-acre Project site. The Revised Project design adds approximately 119 acres of land for PV panels to the Project site (Additional Solar PV Panels), as well as approximately 142 acres of infrastructure corridors for linear infrastructure such as subsurface and/or overhead electrical transmission systems, water lines, water storage, and access roads (Infrastructure Corridors), collectively referred to as the Project Infill Area. The Project Infill Area is generally undeveloped land within and adjacent to the Project area analyzed in the Draft EIR and shares similar characteristics. The Revised Project as compared to the Prior Project is depicted on **Figure 1,** *Project Infill Area and Vicinity Map*.

This memorandum addresses each potential environmental impact category assessed in the Draft EIR. The Revised Project is compared to the prior Project and the level of impact associated with the Revised Project is identified.

The following terms are used in this memorandum:

Prior Project: The Galaxy Solar PV & Storage Project analyzed in the Project Draft EIR published on April 30, 2026.

Revised Project: The Galaxy Solar PV & Storage Project assessed in the Project Final EIR, which includes the Project and Minor Project Modifications within the Project Infill Area.

Project Infill Area: The additional approximately 119 acres proposed to be added to the Project site for PV solar facilities and approximately 142 acres offsite, which would be improved partially with Infrastructure Corridors.

Minor Project Modifications: The Additional Solar PV Panels and Infrastructure Corridors within the Project Infill Area.

Tetra Tech
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The purpose of this memorandum is to disclose the existing conditions present within the Project Infill Area and to evaluate whether the previous impacts analyses for all resource areas were sufficient to assess potential impacts of the Revised Project, including the Minor Project Modifications within the Project Infill Area. This memorandum addresses the following resource areas:

- Aesthetics;
- Agriculture and Forestry Resources;
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Energy;
- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Mineral Resources;
- Noise;
- Public Services;
- Transportation;
- Tribal Cultural Resources;
- Utilities and Service Systems; and
- Wildfire.

1. MINOR PROJECT MODIFICATIONS

Proposed Minor Project Modifications are listed below and shown on **Figure 1,** *Project Infill Area and Vicinity Map* and **Figure 2,** *Updated Site Plan*. The Assessor Parcel Numbers (APN) and additional parcel details, including existing land uses and acreages, are included in **Table 1**, *Project Infill Area Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages*.

The Minor Project Modifications include:

- Placement of the Additional Solar PV Panels on 22 parcels added to the Project site (approximately 119 acres).
- Placement of Infrastructure Corridors on 23 off-site parcels (approximately 142 acres). No PV solar facilities would be placed within the Infrastructure Corridors. Rather, development within the Infrastructure Corridors would be limited to linear infrastructure, such that ground-disturbing activities would not occur over the full extent of the Corridors. Ground-disturbing activities would be limited to placing transmission poles, trenching, and limited grading for access roads. Nine parcels within the Infrastructure Corridors (APNs 428-030-32, 428-174-16, 428-174-17, 428-174-18, 428-174-29, 428-174-33, 428-201-16, 428-202-07, and 428-202-41) would comprise a water line located within an existing medium-voltage corridor that was previously evaluated as part of the Sanborn Solar Project and Enterprise Solar Storage Project EIRs. While the proposed water line was not included in the original Project description, the Project Infill Area would include an above- and/or below-ground water line connection to an existing well at the Sanborn Solar Project site. All affected parcels are located within the Mojave Specific Plan area and are zoned A-1; therefore, no rezoning would be required

The Minor Project Modifications would require the following entitlement approvals:

- Zone Classification Changes (ZCC) for certain parcels within the Project Infill Area as described in **Table 1,** *Project Infill Area Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages,* to change the existing base zoning district (excluding their combining zone classification) to the A (Exclusive Agriculture) District (when not already zoned A). Solar energy electrical generators are authorized within the A District with approval of a Conditional Use Permit (CUP) pursuant to Section 19.12.030.G. of the Kern County Zoning Ordinance.
- Inclusion of the Additional Solar PV Panel parcels in two of the requested CUPs for the Project, additional General Plan Amendment to the Circulation Element of the Kern County General Plan, and additional Zone Variances (detailed in **Table 1**, *Project Infill Area Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages*).

Table 1. Project Infill Area Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation[1/]	Proposed General Plan Designation[1/]	Existing Zoning[2/]	Proposed Zoning[2/]	Zone Variance Requested
Additional Solar PV Panel Parcels										
1	195	235-212-18	10.00	10.00	KCGP	8.5	8.5	A-1	A	Yes
2	195	235-212-19	10.00	10.00	KCGP	8.5	8.5	A-1	A	Yes
3	195	235-212-20	9.32	9.32	KCGP	8.5	8.5	A-1	A	Yes
4	195	235-212-21	9.32	9.32	KCGP	8.5	8.5	A-1	A	Yes
5	212	244-431-07	20.00	20.00	KCGP	8.5;2.5	8.5;2.5	A-1	A	No
6	212	244-431-12	20.00	20.00	KCGP	8.5	8.5	A-1	A	No
7	212	244-451-07	10.00	10.00	KCGP	8.5	8.5	A-1	A	Yes
8	212	244-451-10	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
9	212	244-451-12	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
10	212	244-451-25	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
11	212	244-451-26	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
12	212	244-452-04	5.00	5.00	KCGP	8.5	8.5	A-1	A	Yes
13	212	244-452-09	1.25	1.25	KCGP	8.5	8.5	A-1	A	Yes
14	212	244-452-10	1.25	1.25	KCGP	8.5;2.5	8.5;2.5	A-1	A	Yes
15	212	244-452-11	1.25	1.25	KCGP	8.5; 2.5	8.5; 2.5	A-1	A	Yes
16	212	244-452-12	1.25	1.25	KCGP	8.5	8.5	A-1	A	Yes
17	212	244-452-13	1.25	1.25	KCGP	8.5	8.5	A-1	A	Yes
18	212	244-452-14	1.25	1.25	KCGP	8.5	8.5	A-1	A	Yes
19	212	244-452-15	1.25	1.25	KCGP	8.5; 2.5	8.5; 2.5	A-1	A	Yes
20	212	244-452-16	1.25	1.25	KCGP	8.5; 2.5	8.5; 2.5	A-1	A	Yes
21	212	244-452-27	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
22	212	244-452-28	2.50	2.50	KCGP	8.5	8.5	A-1	A	Yes
Infrastructure Corridors										
23	212	244-451-01	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes
24	212	244-451-02	7.50	0.00	KCGP	8.5; 2.4	8.5; 2.4	A-1	A	Yes
25	212	244-451-03	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes

Parcel Count	Case Map/Section Detail	APN	Parcel Size (Assessor Acres)	CUP Acres	General/ Specific Plan	Existing General Plan Designation[1/]	Proposed General Plan Designation[1/]	Existing Zoning[2/]	Proposed Zoning[2/]	Zone Variance Requested
26	212	244-451-04	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes
27	212	244-451-05	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes
28	212	244-451-06	2.50	0.00	KCGP	8.5; 2.4	8.5; 2.4	A-1	A	Yes
29	212	244-452-01	5.00	0.00	KCGP	8.5	8.5	A-1	A	Yes
30	212	244-452-02	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes
31	212	244-452-17	1.25	0.00	KCGP	8.5;2.5	8.5;2.5	A-1	A	Yes
32	212	244-452-18	1.25	0.00	KCGP	8.5	8.5	A-1	A	Yes
33	212	244-452-19	1.25	0.00	KCGP	8.5	8.5	A-1	A	Yes
34	212	244-452-20	1.25	0.00	KCGP	8.5	8.5	A-1	A	Yes
35	212	244-452-21	1.25	0.00	KCGP	8.5	8.5	A-1	A	Yes
36	212	244-452-25	2.50	0.00	KCGP	8.5	8.5	A-1	A	Yes
37	196	428-030-32	18.76	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
38	196	428-174-16	7.50	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
39	196	428-174-17	2.5	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
40	196	428-174-18	5.00	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
41	196	428-174-29	5.00	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
42	196	428-174-33	20.00	0.00	Mojave Specific Plan	4.1	4.1	A	A	No
43	196	428-201-16	33.00	0.00	Mojave Specific Plan	4.1; 2.5	4.1; 2.5	A-1 FPS	A-1 FPS	No
44	196	428-202-07	5.00	0.00	Mojave Specific Plan	4.1	4.1	A-1	A-1	No
45	196	428-202-41	9.24	0.00	Mojave Specific Plan	4.1	4.1	A-1 FPS	A-1 FPS	No

Notes:
APN = Assessor Parcel Number; CUP = Conditional Use Permit; KCGP = Kern County General Plan

1/ Kern County General Plan (KCGP) and Specific Plan (SP) Map Code Designation:
- 2.4 (Steep Slope)
- 2.5 (Flood Hazard)
- 4.1 (Accepted County Plan Areas)
- 8.5 (Resource Management, Min. 20 Acre)

2/ Kern County Zoning District:
A (Exclusive Agriculture); A-1 (Limited Agriculture); and FPS (Flood Plain Secondary)

Project Infill Area Land Use and Zoning

The Project Infill Area is located within unincorporated Kern County and the administrative boundaries of the Kern County General Plan. The Project is subject to the provisions of the Kern County Zoning Ordinance and spans across Zone Maps 195, 196, and 212. The Project Infill Area would not require General Plan land use designation changes. The existing and proposed zoning designations are depicted on **Figure 3**, *Project Infill Area Existing Zoning Classifications,* and **Figure 4**, *Project Infill Area Proposed Zone Classifications*.

Addition of the Project Infill Area, as proposed, includes the following requests also depicted on **Figure 5**, *Project Infill Area CUP and ZCC Boundaries*:

Zone Change:

(a) Zone Classification Change No. 5, Map 195 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) on approximately 38.64 acres, as shown on **Figure 5**, *Project Infill Area CUP and ZCC Boundaries*;

(b) Zone Classification Change No. 4, Map 212 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) on approximately 116.25 acres, as shown on **Figure 5**, *Project Infill Area CUP and ZCC Boundaries*;

Conditional Use Permit:

The Additional Solar PV Panel parcels within Zone Map 195 would be added to the Project's CUP No. 4, and the Additional Solar PV Panel parcels within Zone Map 212 would be added to the Project's CUP No. 7, as described below.

(a) Conditional Use Permit No. 4, Map 195, to allow for the construction and operation of a solar facility and associated infrastructure, including energy storage and temporary construction staging and equipment storage on an additional approximate 38.64 acres in an A (Exclusive Agriculture) District, pursuant to Chapter 19.12.030.G and 19.12.030K of the Kern County Zoning Ordinance, as shown on **Figure 5**, *Project Infill Area CUP and ZCC Boundaries*;

(b) Conditional Use Permit No. 7, Map 212, to allow for the construction and operation of a solar facility and associated infrastructure, including energy storage and temporary construction staging and equipment storage on an additional approximate 80 acres in an A (Exclusive Agriculture) District, pursuant to Chapter 19.12.030.G and 19.12.030K of the Kern County Zoning Ordinance, as shown on **Figure 5**, *Project Infill Area CUP and ZCC Boundaries*.

General Plan Amendment:

(a) General Plan Amendment No. 5, Map 195, to the Circulation Element of the Kern County General Plan (General Plan) to remove future road reservations on section and mid-section lines within the project boundary, as shown on **Figure 6,** *Project Infill Area General Plan Amendment (Circulation)*;

Zone Variance:

(a) Zone Variance No. 1, Map 195, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the A-1 (Limited Agriculture) District to the A (Exclusive Agriculture) District across approximately 38.64 total acres;

(b) Zone Variance No. 2, Map 212, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the A-1 (Limited Agriculture) District to the A (Exclusive Agriculture) District across approximately 76.25 total acres.

Project Infill Area Environmental Setting

The Project Infill Area is generally undeveloped land within and adjacent to the Project area analyzed in the Project Draft EIR and shares similar characteristics. The closest sensitive receptor to the Project Infill Area, on land not owned by the Project proponent, is a residence located approximately 1 mile to the southwest at APN 429-152-21, in Section 12, Township 10 North, Range 12 West. The Project Infill Area Environmental Setting is described as relevant for each resource area analyzed below.

Project Access

The proposed Minor Project Modifications would not change Project access from what was evaluated in the Draft EIR; primary site access is from the mapped alignment of 45th Street via State Route 58 with additional access from the current alignment of Silver Queen Road via United Street. Current legal access for all existing residences would be preserved and would not be hindered by the Project. Furthermore, the Project would provide additional public access to parcels within the Project vicinity that are not controlled by the Project proponent through the Vesting Tentative Parcel Map process. The Project would also provide alternative access easements for parcels requiring access through the recordation of such easements.

Construction

There are no changes from the Project's proposed construction schedule, which is expected to last approximately 26 months and would proceed following receipt of all permits and agency approvals. The construction activities for the Project are categorized into three main phases:

- Site Preparation;
- System Installation; and
- Testing, Commissioning, and Cleanup.

Details for construction phases and their respective durations and required equipment are unchanged from those presented in **Table 3-4**, *Solar PV Construction Activity, Duration, and Equipment* in **Chapter 3**, *Project Description,* of the Draft EIR. Construction workforce, hours and schedule are unchanged from those provided in the Draft EIR.

Project construction water usage is anticipated to be approximately 451 acre-feet during the 26-month construction period and would be sourced from onsite or offsite water wells supplemented by water purchased from local water purveyors, unchanged from the analysis in the Draft EIR. Construction water demand and sources would be unchanged from those provided in the Draft EIR. Hazardous materials use and disposal and solid waste generation during construction would also be unchanged from those provided in the Draft EIR.

Operation

There are no changes to the proposed operation of the Project. As presented in the Draft EIR, it is anticipated that approximately six permanent, full-time employees would be needed to maintain the facility included in the Project. The annual operational water usage is expected to be approximately 6 acre-feet of water. Hazardous materials use and disposal and solid waste generation during operation would also be unchanged from those provided in the Draft EIR.

Decommissioning

There are no changes to the proposed decommissioning of the Project. As presented in the Draft EIR, the Project has an anticipated operational life of up to 35 years. All decommissioning and reclamation activities would be outlined in a step-by-step Decommissioning Plan and would adhere to the requirements of the appropriate governing authorities as well as all applicable local, state, and federal requirements and best management practices. Decommissioning activities would be the same as provided in the Draft EIR.

2. ENVIRONMENTAL ANALYSIS OF THE REVISED PROJECT

This memorandum addresses each potential environmental impact category assessed in the Draft EIR as described below. The Revised Project is compared to the Prior Project and the level of impact associated with the Revised Project is identified.

- Aesthetics;
- Agriculture and Forestry Resources;
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Energy;
- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Mineral Resources;
- Noise;
- Public Services;
- Transportation;
- Tribal Cultural Resources;
- Utilities and Service Systems; and
- Wildfire.

Aesthetics

The Revised Project would have similar aesthetic impacts as the Prior Project. Due to the unchanged workforce, construction equipment, and anticipated vehicle trips, potential construction impacts would be similar to those identified in the Draft EIR. The Project Infill Area is primarily surrounded by or adjacent to the Project area analyzed in the Draft EIR and is located the same distance from sensitive receptors analyzed in the Draft EIR. There are no local areas that are designated as scenic vistas or Officially Designated State Scenic Highways within the vicinity of the Project Infill Area. Further, the Minor Project Modifications would be consistent with scale and appearance of the facilities and improvements evaluated in the Draft EIR. Views from all Key Observation Points described in the Draft EIR would be unchanged for the Revised Project. All mitigation measures from the Draft EIR related to aesthetics would be implemented within the Project Infill

Area. **Mitigation Measures MM 4.1-1** through **MM 4.1-5** would reduce visual impacts associated with the Revised Project by limiting vegetation removal, planting native vegetation, providing privacy fencing, reducing visibility of Project facilities, and minimizing debris and trash. Native vegetation would be left in place on the Project site where feasible, allowing for a natural screening of Project components. Additionally, per **Mitigation Measure MM 4.1-6**, any nighttime construction would use lighting designed to provide the minimum illumination needed, thereby minimizing adverse impacts on any nearby residents. Finally, the Revised Project would implement **Mitigation Measure MM 4.1-7**, which requires the Project proponent to demonstrate the solar arrays and hardware are designed to minimize glare. With the exception of impacts to visual character, impacts to aesthetics would remain less than significant, consistent with the findings in the Draft EIR. Also consistent with findings in the Draft EIR, impacts to visual character would remain significant and unavoidable. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to aesthetics. Therefore, all impact conclusions in the Draft EIR related to aesthetics impacts would be the same for the Revised Project.

Agriculture and Forestry Resources

The Revised Project would have similar impacts to agriculture and forestry resources as the Prior Project. Same as the Project area evaluated in the Draft EIR, the Project Infill Area is not designated by the California Department of Conservation as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland; the Department of Conservation designates the Project Infill Area as Nonagricultural or Natural Vegetation. Additionally, same as the Project area evaluated in the Draft EIR, none of the Project Infill Area parcels are subject to a Williamson Act Land Use contract or occur within an Agriculture Preserve boundary. The Project Infill Area is not located on land zoned as forest land, timberland, or timberland production. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to agriculture and forestry resources. Therefore, all impact conclusions in the Draft EIR related to agriculture and forestry resources impacts would be the same for the Revised Project.

Air Quality

The Revised Project would have similar impacts to air quality as the Prior Project. Due to the unchanged workforce, construction equipment, and anticipated vehicle trips, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including anticipated emissions from off-road equipment exhaust and on-road vehicle trip generation for employee trips; thus, potential operational impacts would be similar to those identified in the Draft EIR. The Project Infill Area is primarily surrounded by or adjacent to the Project area analyzed in the Draft EIR and is located the same distance from sensitive receptors analyzed in the Draft EIR. All mitigation measures from the Draft EIR related to air quality would be implemented within the Project Infill Area. **Mitigation Measure MM 4.3-1** would ensure that the Revised Project would continuously comply with applicable rules and regulations set forth by the Eastern Kern Air Pollution Control District. The Revised Project also would implement **Mitigation Measures MM 4.3-2** and **MM 4.3-3**, such that nitrogen oxides, particulate matter with a diameter

less than 10 microns (or PM_{10}), and particulate matter with a diameter less than 2.5 microns (or $PM_{2.5}$) emissions during Project construction would be below the Eastern Kern Air Pollution Control District significance thresholds. Implementation of **Mitigation Measures MM 4.3-3** through **MM 4.3-5** would ensure construction and decommissioning activities would employ emissions reduction strategies as well as notify surrounding property owners of onsite activities and the presence of an onsite construction coordinator. **Mitigation Measures MM 4.3-6** and **MM 4.3-7** would address potential Valley Fever risk by implementing fugitive dust control measures, establishing a public complaint protocol for excessive dust generation, and requiring Valley Fever-related training for construction workers. Finally, **Mitigation Measure MM 4.3-8** would require the implementation of a COVID-19 Health and Safety Plan to address lingering COVID-19 symptoms exacerbated by increased $PM_{2.5}$ emissions resulting from the Revised Project. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to air quality, and the mitigation measures in the EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to air quality impacts would be the same for the Revised Project.

Biological Resources

The Revised Project would have similar impacts to biological resources as the Prior Project. Biological surveys have been conducted for the entirety of the Project Infill Area. Pedestrian biological surveys were completed in spring 2017 and spring 2018 (Dudek 2019a), and in spring 2023, spring 2024, and spring and fall 2025 (Tetra Tech 2025). Additionally, protocol-level surveys for desert tortoise (*Gopherus agassizii*) were conducted by Tetra Tech in the spring of 2026.

Based on these surveys and additional desktop analysis, vegetation within the Project Infill Area is substantially similar to that analyzed within the Draft EIR, consisting mostly of allscale scrub and creosote bush – white bursage scrub, as well as disturbed and developed areas. Emergent Western Joshua trees (WJT; *Yucca brevifolia*) are scattered throughout the Project Infill Area. WJT is a state candidate species under the California Endangered Species Act and is protected under the California Desert Native Plant Act. No Joshua tree woodlands occur within the Project Infill Area.

Based on pedestrian surveys and additional desktop analysis (literature review and database search) and consistent with the analysis in the Draft EIR, the Project Infill Area contains habitat that supports insects, rodents, and small birds that provide a prey base for raptors and terrestrial wildlife. The Project Infill Area supports a similar diversity of special-status species as those analyzed in the Draft EIR.

Due to the similarity of vegetation and habitats occurring within the Project Infill Area and the Project site analyzed in the Draft EIR, potential impacts to plants, wildlife, and potentially jurisdictional waters within the Project Infill Area would be similar to those impacts identified in the Draft EIR. With the exception of WJT, impacts to biological resources would remain less than significant with implementation of **Mitigation Measures MM 4.1-1, MM 4.1-3, MM 4.1-6, MM 4.1-7**, **MM 4.3-3**, **MM 4.4-1** through **MM 4.4-23**, **MM 4.9-2**, **MM 4.10-1, MM 4.10-2**, **MM 4.13-1**, and **MM 4.14-1**, consistent with the findings in the Draft EIR. Also consistent with findings in the Draft EIR, impacts to WJT would remain significant and unavoidable. No Joshua tree woodlands occur within the Project Infill Area.

No new impacts to biological resources for the Project Infill Area were identified and no new mitigation measures for biological resources are required. All mitigation measures from the Draft EIR related to biological resources would be implemented within the Project Infill Area. Accordingly, the Revised Project would not result in any new significant impacts or substantial increases in the severity of previously identified impacts related to biological resources, and all impact conclusions related to biological resources in the Draft EIR would remain the same.

Cultural Resources and Tribal Cultural Resources

The Revised Project would have similar impacts to cultural and tribal cultural resources as the Prior Project. The Project Infill Area was previously surveyed for cultural resources in 2017 and 2018 (Dudek 2019b), 2023 and 2024 (SRI 2025), and 2026 (Tetra Tech 2026). No resources in the Project Infill Area were found to be California Register of Historic Resources eligible. On November 9, 2022, and July 31, 2025, the NAHC sacred land file results indicated no sacred lands are within or near the Project site. The County's previous consultation efforts with interested Native American groups did not result in the identification of any tribal cultural resources in the Project area. Based on the results of these cultural resource technical studies, potential impacts to cultural and tribal cultural resources resulting from the Project Infill Area would be similar to those identified in the Draft EIR, and the mitigation measures identified for cultural resources are sufficient to address those impacts.

Implementation of **Mitigation Measure MM 4.5-1** requires cultural resources sensitivity training for construction workers. **Mitigation Measure MM 4.5-2** requires a Cultural Resources Treatment Plan. **Mitigation Measure MM 4.5-3** requires appropriate treatment of uncovered archaeological resources, including those that qualify as historical resources. **Mitigation Measure MM 4.5-4** requires archaeological and Native American monitoring to ensure appropriate treatment of unearthed archaeological resources during construction. Implementation of these mitigation measures would reduce potential impacts to historical resources to less than significant. **Mitigation Measure MM 4.5-5** would ensure that appropriate laws and protocols are followed if human remains are uncovered and ensure that impacts are not significant.

With implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5,** the Revised Project would not result in significant impacts to cultural or tribal cultural resources. No new cultural resources or tribal cultural resources impacts for the Project Infill Area were identified, and no new mitigation measures for cultural resources or tribal cultural resources are required to reduce impacts to less than significant levels. All mitigation measures from the Draft EIR related to cultural and tribal cultural resources would be implemented within the Project Infill Area. Accordingly, the Revised Project would not result in any new significant impacts related to cultural resources or tribal cultural resources, and all impact conclusions in the Draft EIR would remain the same.

Energy

The Revised Project would have similar impacts to energy as the Prior Project. Due to the unchanged workforce, construction equipment, and anticipated vehicle trips, potential construction impacts for the Revised Project would be similar to those identified in the Draft EIR. Similarly, operational characteristics

would be unchanged, including electricity and diesel fuel use and employee trips; thus, potential operational impacts would be similar to those identified in the Draft EIR. All mitigation measures from the Draft EIR related to energy would be implemented within the Project Infill Area. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to energy, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to energy impacts would be the same for the Revised Project.

Geology and Soils

The Revised Project would have similar impacts to geology and soils as the Prior Project. The Project Infill Area is subject to the same geological conditions as the rest of the Project, including the associated potential for fault rupture, ground shaking, landslides, liquefaction and lateral spreading, soil erosion, subsidence, soil collapse, and expansive soils. The Project Infill Area also is predominantly underlain by Holocene or recent alluvium (Q). All mitigation measures from the Draft EIR related to geology and soils would be implemented within the Project Infill Area.

Mitigation Measure MM 4.7-1 requires that a site-specific geotechnical study be conducted to evaluate soil conditions and geologic hazards on the Project site. **Mitigation Measure MM 4.7-2** requires that a California registered and licensed geotechnical engineer be hired by the Project proponent to design Project facilities to withstand probable seismically induced ground shaking. All grading and construction onsite would adhere to the specifications, procedures, and site conditions contained in the final design plans, which would be fully compliant with the seismic recommendations provided by the California registered and licensed geotechnical engineer in accordance with California and Kern County Building Code requirements. Structures constructed as part of the Revised Project would be required by state law to be constructed in accordance with all applicable International Building Code and California Building Code earthquake construction standards, including those relating to soil characteristics. Furthermore, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented per the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit Program. The SWPPP would detail that existing vegetation and topography are to be preserved to the maximum extent possible. The SWPPP would also specify various types of best management practices (BMP), including erosion control BMPs, to prevent soil from moving offsite; all temporary erosion control measures required by the Kern County Grading Code (Chapter 17.28.140) would be incorporated into the SWPPP (**Mitigation Measure MM 4.10-1**). If required, the Revised Project's septic system would be constructed to comply with applicable requirements of the Kern County Environmental Health Services Division, and **Mitigation Measure MM 4.7-3** would require the Project operator to obtain all required permits and approvals from the Kern County Environmental Health Services Division and to implement all required conditions regarding the design and siting of the septic system. Finally, **Mitigation Measures MM 4.7-4** through **MM 4.7-7** would require Paleontological Resources Awareness Training for construction workers, use of a qualified paleontological monitor during construction activities, and appropriate treatment of inadvertently uncovered paleontological resources.

Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to geology and soils, and the mitigation

measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to geology and soils would be the same for the Revised Project.

Greenhouse Gas Emissions

The Revised Project would have similar impacts to greenhouse gases (GHG) emissions as the Prior Project. Due to the unchanged workforce, construction equipment, and anticipated vehicle trips, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including anticipated emissions from off-road equipment exhaust and on-road vehicle trip generation for employee trips; thus, potential operational impacts would be similar to those identified in the Draft EIR. Once operational, the Revised Project would generate renewable energy with minimal associated GHG emissions and would result in displaced GHG emissions due to the gradual switch from non-renewable GHG-generating energy to renewable energy, estimated to be approximately 445,589 metric tons (MT) of carbon dioxide equivalent GHGs annually that would otherwise be emitted to produce an equivalent amount of energy from fossil fuel sources. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to GHGs. Therefore, all impact conclusions in the Draft EIR related to GHG impacts would be the same for the Revised Project.

Hazards and Hazardous Materials

The Revised Project would have similar impacts to hazards and hazardous materials as the Prior Project. According to a review of the Department of Toxic Substances Control's EnviroStor database, there are no hazardous release sites located within the Project Infill Area (DTSC, 2025). Similarly, the State Water Resources Control Board GeoTracker database also showed no listed release sites within the Project Infill Area (SWRCB, 2025). All other environmental conditions regarding hazardous substances remain unchanged from those described in the Draft EIR. The Project Infill Area is not located within a known oil production field, nor does the Project Infill Area have any known active or abandoned oil wells The Project Infill Area is not located within the Airport Influence Area of the Mojave Air & Space Port. According to the California Department of Forestry and Fire Protection (CAL FIRE) Kern County Fire Hazard Severity Zone (FHSZ) Maps for Local Responsibility Areas (LRA) and State Responsible Areas (SRA), the Project Infill Area is classified as LRA Moderate. All mitigation measures from the Draft EIR related to hazards and hazardous materials would be implemented within the Project Infill Area.

Mitigation Measure MM 4.9-1 requires the preparation of a Hazardous Materials Business Plan that would describe proper handling, storage, transport, and disposal techniques and methods to be used to avoid spills and minimize potential impacts in the event of a spill. **Mitigation Measure MM 4.10-1** would require the Revised Project to implement applicable BMPs included in an NPDES-mandated SWPPP during construction to minimize the potential for incidental spills. Relevant BMPs would include designated fueling and maintenance areas that are supplied with temporary spill containment equipment, such as absorbent booms and pads, and hazardous waste disposal containers. **Mitigation Measure MM 4.9-2** would reduce potential impacts related to use of herbicides to a less-than-significant level. **Mitigation Measure MM 4.9-3** would require the Revised Project to comply with the County's regulations, applicable Federal Aviation

Administration regulations, and military review requirements to ensure that there is no conflict with airport operations and no safety hazards are presented. **Mitigation Measure MM 4.15-1** would require the preparation of a Construction Traffic Control Plan that considers access for emergency vehicles to the Revised Project site. Additionally, as required by **Mitigation Measure MM 4.14-1**, the Project proponent would develop and implement a Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the current California Fire Code and Kern County Fire Code.

Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to hazards and hazardous materials, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to hazards and hazardous materials would be the same for the Revised Project.

Hydrology and Water Quality

The Revised Project would have similar impacts to hydrology and water quality as the Prior Project. As shown on **Figure 7**, *Project Infill Area Floodplain Map*, a Federal Emergency Management Agency (FEMA)-designated flood zone, Flood Zone "A," spans a portion of the Project Infill Area, indicating that this area could flood during a 100-year flood event. Project facilities located within a FEMA-designated flood zone would be designed to meet County requirements. All portions of the Project Infill Area located outside of Flood Zone "A" are located within FEMA-designated Flood Zone "X," which indicates areas of minimal flood hazard. Due to the unchanged workforce, construction equipment, and water demand, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including proposed operations and maintenance (O&M) activities and water demand; thus, potential operational impacts would be similar to those identified in the Draft EIR. Further, all mitigation measures from the Draft EIR related to hydrology and water quality would be implemented within the Project Infill Area.

Per **Mitigation Measure MM 4.10-1**, the SWPPP would include BMPs designed to prevent the occurrence of soil erosion and discharge of other construction-related pollutants that could contaminate water quality, and would be applicable to all areas of the Revised Project, including the solar arrays, associated facilities, and the generation tie (gen-tie) line. **Mitigation Measure MM 4.10-2** would require the preparation of a Final Drainage Plan per the Kern County Development Standards and the Kern County Code of Building Regulations prior to issuance of a grading permit. **Mitigation Measure MM 4.9-1** would require the Project proponent to provide a Hazardous Materials Business Plan that would delineate hazardous material and hazardous waste storage areas; describe proper handling, storage, transport, and disposal techniques; describe methods to be used to avoid spills and minimize impacts in the event of a spill; describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction; and establish public and agency notification procedures for spills and other emergencies, including fires.

Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to hydrology and water quality, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to hydrology and water quality would be the same for the Revised Project.

Land Use and Planning

The Revised Project would have similar impacts to land use as the Prior Project. The Project Infill Area is generally undeveloped land within and adjacent to the Project area analyzed in the Project Draft EIR and would not divide an established community. The Kern County General Plan, Mojave Specific Plan, and the Kern County Zoning Ordinance establish land use policies and regulations that are applicable to the Project Infill Area. Due to the unchanged construction and operational characteristics of the Revised Project, the Revised Project would be consistent with the goals and policies of the Kern County General Plan and Mojave Specific Plan, as described in the Draft EIR. The Project proponent is requesting ZCCs for certain parcels within the Project Infill Area to change the existing base zoning district (excluding their combining zone classification) to the A (Exclusive Agriculture) District, similar to the rest of the Project site. Solar energy electrical generators are authorized within the A District with approval of a CUP pursuant to Section 19.12.030.G. of the Kern County Zoning Ordinance. With approval of the requested CUPs, the Revised Project would be consistent with applicable land use policies and regulations. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to land use, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to land use quality would be the same for the Revised Project.

Mineral Resources

The Revised Project would have similar impacts to mineral resources as the Prior Project. The Project Infill Area is not designated as a mineral recovery area by the Kern County General Plan, nor is it identified as a Mineral Resource Zone by the Department of Conservation's State Mining and Geology Board. There are no known oil, gas, or geothermal wells on the Project Infill Area. Additionally, there are no active mines or petroleum extraction facilities within or immediately adjacent to the Project Infill Area. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to mineral resources. Therefore, all impact conclusions in the Draft EIR related to mineral resources would be the same for the Revised Project.

Noise

The Revised Project would have similar impacts to noise as the Prior Project. Land uses surrounding the Revised Project site, including the Project Infill Area, primarily comprise renewable energy development, rural residential development, livestock grazing, military uses, and undeveloped lands. Due to the unchanged workforce, construction equipment, schedule, and anticipated vehicle trips, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged; thus, potential operational impacts would be similar to those identified in the Draft EIR. The Project Infill Area is primarily surrounded by or adjacent to the Project area analyzed in the Draft EIR and is located the same distance from sensitive receptors analyzed in the Draft EIR. Construction activities associated with the Revised Project would be in accordance with the hourly limitations specified in the Kern County Code of Ordinances, and operational noise impacts would be below Kern County noise standards and

would result in less than significant impacts. All mitigation measures from the Draft EIR related to noise would be implemented within the Project Infill Area.

Although potential temporary construction noise impacts would be less than significant, to ensure compliance with Kern County's Noise Ordinance Code, required hourly limitations have been included in **Mitigation Measure MM 4.13-1**. Implementation of **Mitigation Measures MM 4.13-1** and **MM 4.13-2** would further reduce impacts during construction activities. **Mitigation Measure MM 4.13-3** would also be implemented to notify the public of the Project schedule and provide contact information, if needed. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to noise, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to noise would be the same for the Revised Project.

Public Services

The Revised Project would have similar impacts to public services as the Prior Project. Due to the unchanged workforce, construction equipment, and schedule, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged; thus, potential operational impacts would be similar to those identified in the Draft EIR. The Revised Project would not permanently increase the number of people on the Project site and would not increase the service demand for fire and police protection services and other facilities in Kern County. All mitigation measures from the Draft EIR related to public services would be implemented within the Project Infill Area.

As required by **Mitigation Measure MM 4.14-1**, the Project proponent would develop and implement a Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the current California Fire Code and Kern County Fire Code. The plan would be used throughout the construction period, as well as during operations, and would include emergency fire precautions for vehicles and equipment as well as implement fire rules and trainings so personnel are equipped to handle fire threats. Through implementation of **Mitigation Measure MM 4.14-2**, the Revised Project would pay all legally required property taxes or, if the Project qualifies, based on State Legislative action and the State Board of Equalization guidance, for any reduction in property taxes under a Solar Tax Exclusion or other specific property tax relief for solar or battery storage regardless of the name, then the Project shall pay a Cumulative Impact Charge. Through implementation of **Mitigation Measure MM 4.14-3**, if the ownership of the Project is sold to a city, county, or utility company that pays assessed taxes that are under $3,000 per megawatt, a Supplemental Cumulative Impact Charge would be paid for the difference annually up to $3,00 per megawatt. Through implementation of **Mitigation Measures MM 4.14-4** and **MM 4.14-5**, the Project proponent would work with the County to determine how the use of sales and use taxes from construction of the Project can be maximized, and provide a letter detailing efforts encouraging contractors to hire at least 50 percent of works from local Kern County communities. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to public services, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to public services would be the same for the Revised Project.

Transportation

The Revised Project would have similar impacts to transportation as the Prior Project. Due to the unchanged workforce, construction equipment, schedule, and anticipated vehicle trips, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including vehicle trips generated by employees; thus, potential operational impacts would be similar to those identified in the Draft EIR. Project access would be unchanged from what was evaluated in the Draft EIR; primary site access is from the mapped alignment of 45th Street via State Route 58 with additional access from the current alignment of Silver Queen Road via United Street. Current legal access for all existing residences would be preserved and would not be hindered by the Revised Project. Construction traffic would be temporary and would not result in long-term or permanent changes to local roadway conditions. Trips associated with routine O&M would be negligible in terms of traffic impact. There are no dedicated pedestrian or bicycle facilities in the immediate vicinity of the Project Infill Area or along the surrounding roadways. Proposed public access easement vacations and removal of road reservations for the Revised Project would not restrict the traveling public or neighboring property owners' access to areas outside the Project boundary. All mitigation measures from the Draft EIR related to transportation would be implemented within the Project Infill Area. **Mitigation Measures MM 4.15-1** and **4.15-2** require, among other things, the development of a construction traffic control plan, which would further reduce potential impacts to intersections resulting from temporary construction traffic. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to transportation, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to transportation would be the same for the Revised Project.

Utilities and Service Systems

The Revised Project would have similar impacts to utilities and service systems as the Prior Project. Due to the unchanged workforce, construction equipment, and water demand, potential construction impacts would be similar to those identified in the Draft EIR. Similarly, operational characteristics would be unchanged, including proposed O&M activities and water demand; thus, potential operational impacts would be similar to those identified in the Draft EIR. All mitigation measures from the Draft EIR related to utilities and service systems would be implemented within the Project Infill Area. **Mitigation Measure MM 4.10-1** would require implementation of a SWPPP during construction, which would include BMPs related to stormwater drainage. Per **Mitigation Measure MM 4.10-2**, a Final Drainage Plan would be prepared in accordance with the Kern County Development Standards and Kern County Code of Building Regulations and would demonstrate the ability of any planned onsite storm drainage to adequately collect onsite stormwater flows in accordance with all applicable standards and BMPs. Additionally, per **Mitigation Measure MM 4.17-1**, a collection and recycling program would be implemented during decommissioning to recycle Project components and minimize disposal of Project components in landfills. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to utilities, and the mitigation measures in the Draft EIR are sufficient to address those

impacts. Therefore, all impact conclusions in the Draft EIR related to utilities and service systems would be the same for the Revised Project.

Wildfire

The Revised Project would have similar impacts to wildfire as the Prior Project. According to the CAL FIRE Kern County FHSZ Maps for LRAs and SRAs, the Project Infill Area is classified as LRA Moderate. Given this designation, the Project Infill Area is outside of areas identified by CAL FIRE as having substantial or high wildfire risk. The Project Infill Area is not located along an identified emergency evacuation route and is not identified in any adopted emergency evacuation plan. In compliance with applicable Fire Code and Building Code requirements, construction and maintenance/operations managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction would be maintained on site. Additionally, Project construction and maintenance/operations would comply with applicable existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. **Mitigation Measure MM 4.15-1** would require that all oversize vehicles used on public roadways during construction obtain required permits and obtain approval of a Construction Traffic Control Plan, as well as identify anticipated construction delivery times and vehicle travel routes in advance to minimize construction traffic during AM and PM peak hours. This would ensure that the potential for Project-related construction traffic to interfere with vehicular circulation or emergency access along local roadways would be minimized, including during any times of emergency evacuation. Additionally, Project operations would generate limited daily traffic traveling to and from the site for work and/or for intermittent maintenance purposes. The Project proponent/operator also would develop and implement a Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the 2022 California Fire Code and Kern County Fire Code plus procedures on vegetation clearing and maintenance for use during construction, operation and decommissioning, per implementation of **Mitigation Measure MM 4.14-1**. All Revised Project facilities would be installed in accordance with applicable County and state regulations related to fire protection. Thus, the Revised Project would not result in any new significant environmental impacts or the substantial increase in severity of previously identified significant impacts related to wildfire, and the mitigation measures in the Draft EIR are sufficient to address those impacts. Therefore, all impact conclusions in the Draft EIR related to wildfire would be the same for the Revised Project.

REFERENCES

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Dudek. 2019b. Cultural Resources Inventory and Evaluation for the Sanborn Solar Project, Kern County, California. Dated January 2019.

SRI. 2025. Cultural Resources Inventory and Evaluation Report for the Galaxy Solar PV and Storage Project, Kern County, California. Dated November 2025.

Tetra Tech. 2025. Biological Resources Summary Technical Report, Galaxy Solar PV & Storage Project, Kern County, California. Dated November 2025.

Tetra Tech. 2026. Memorandum: Infill Survey of the Phase I Cultural Resource Inventory and Evaluation for the Galaxy Solar PV & Storage Project, Kern County, California. Dated April 22, 2026.

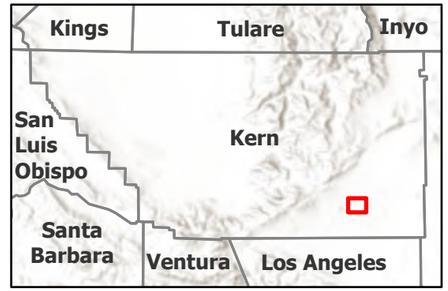
ATTACHMENTS

Attachment 1 Figures

Galaxy Solar PV & Storage Project

Kern County, CA

Galaxy Project Infill Area - Figure 1. Project Infill Area and Vicinity Map



Project Infill Area

- Infill Area
- Infrastructure Corridor
- Additional Solar PV Panels
- Project Site

N

0 0.25 0.5 1 Miles

Scale is 1:32,400 when printed at 11"x17"

Not for Construction

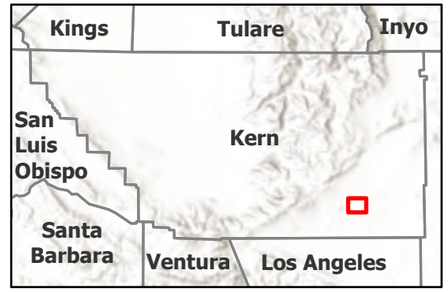
*No Project Modifications

Document Path: M:\local\GIS\GIS_ES\Projects\PDR\projects\194_PROJECTS\TERRA_GEN\194_1403_0002_GALAXY\PROJ\mxd_Memo.aprx

Galaxy Solar PV & Storage Project

Kern County, CA

Galaxy Project Infill Area - Figure 2. Revised Project Features



Revised Project Features

- Infill Area
- Infrastructure Corridor
- Additional Solar PV Panels
- Project Site
- 230-kV Switchyard
- Offsite Water Storage Tank Area
- Interconnection
- SCE Work Areas
- Temporary Offsite Laydown Yard
- Gen-tie Line (New)
- Alternate Gen-tie Line (New)

Other Applicant and/or Affiliate Controlled*

- Gen-tie Line/Corridor
- Other Applicant Controlled Parcels

Transportation

- Railroad

Military Jurisdiction

- Edwards Air Force Base

*Already approved under separate projects.

N

0 0.25 0.5 1 Miles

Scale is 1:32,400 when printed at 11"x17"

Not for Construction

*No Project Modifications

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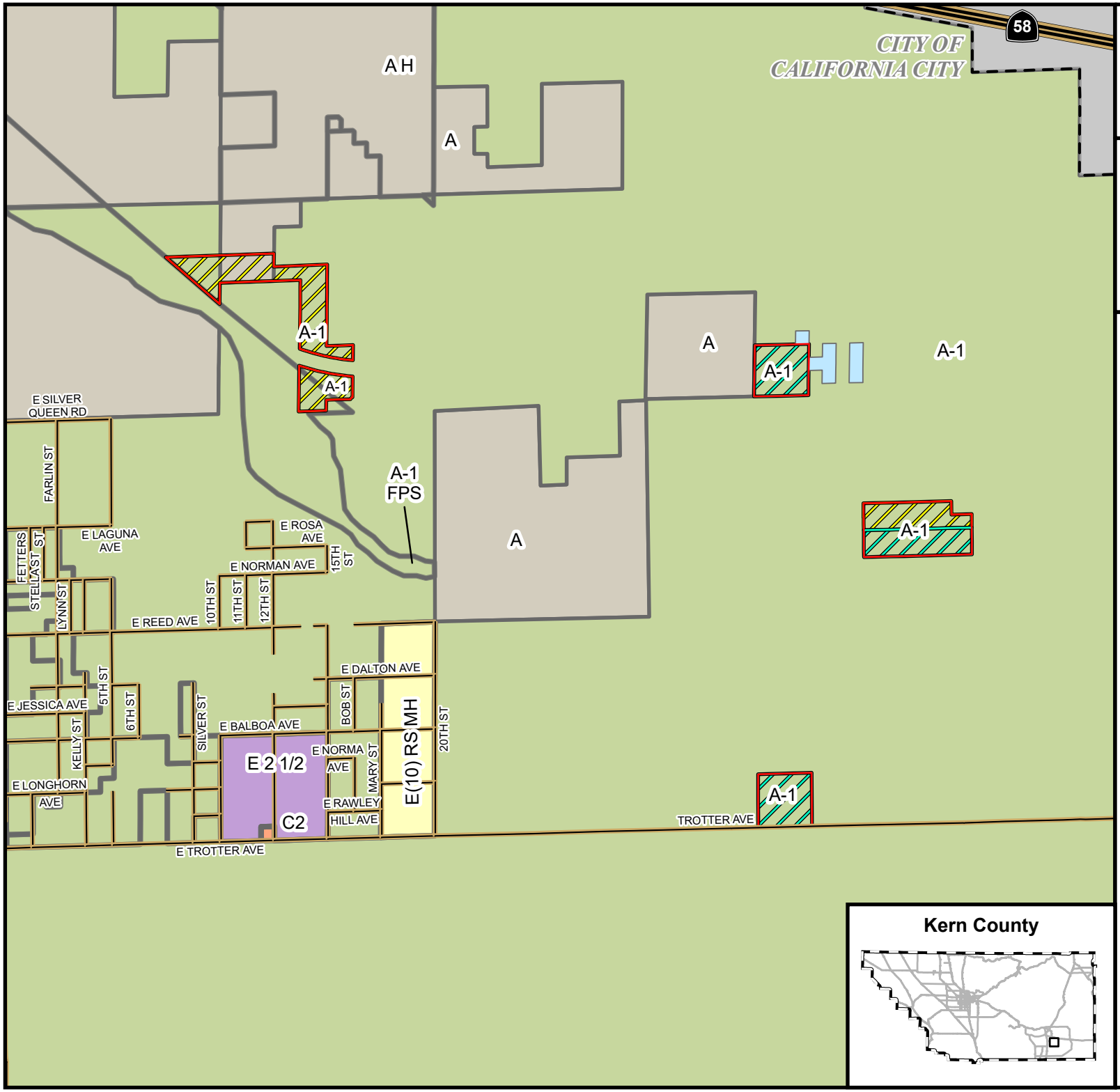

Galaxy Solar PV & Storage Project

Galaxy Project Infill Area

Figure 3. Project Infill Area Existing Zone Classifications

Galaxy Solar Storage, LLC

- Infill Area
- Other Applicant Controlled Parcels
- Infrastructure Corridor
- Additional Solar PV Panels
- State Highway
- Locals
- Dirt Roads
- City Limits

Kern County Zoning Classifications

- A - Exclusive Agriculture
- A-1 - Limited Agriculture
- C-2 - General Commerical
- E(10) - Estate (10 Acres)
- Estate 2.5 Acres (E 2 1/2)
- Light Industrial (M-1)
- Heavy Industrial (M-3)
- Open Space (OS)
- H - Airport Approach Height
- MH - Mobilehome Combining
- PD - Precise Development Combining
- RS - Residential Suburban Combining
- FPS - Floodplain Secondary Combining

T10N/R11W - Sec. 4, 8
T11N/R11W - Sec. 32
T11N/R12W - Sec. 35, 36

Created on: 5/27/2026

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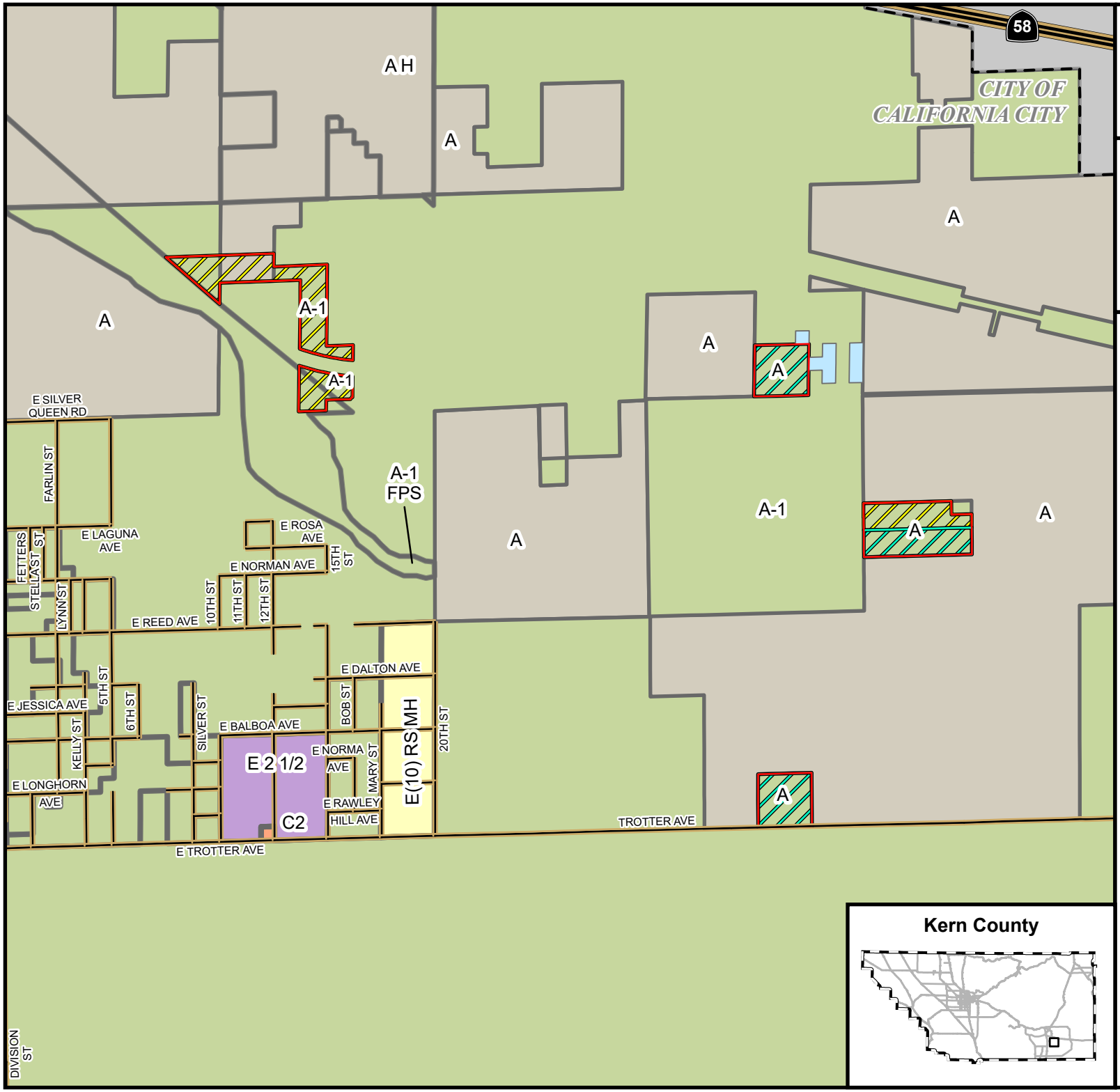
Kern County

Kern County Planning & Natural Resources Department



Galaxy Solar PV & Storage Project

Galaxy Project Infill Area

Figure 4. Project Infill Area Proposed Zone Classifications

Galaxy Solar Storage, LLC

- Infill Area
- Other Applicant Controlled Parcels
- Infrastructure Corridor
- Additional Solar PV Panels
- State Highway
- Locals
- Dirt Roads
- City Limits

Kern County Zoning Classifications

- A - Exclusive Agriculture
- A-1 - Limited Agriculture
- C-2 - General Commerical
- E(10) - Estate (10 Acres)
- Estate 2.5 Acres (E 2 1/2)
- H - Airport Approach Height
- MH - Mobilehome Combining
- PD - Precise Development Combining
- RS - Residential Suburban Combining
- FPS - Floodplain Secondary Combining

T10N/R11W - Sec. 4, 8
T11N/R11W - Sec. 32
T11N/R12W - Sec. 35, 36

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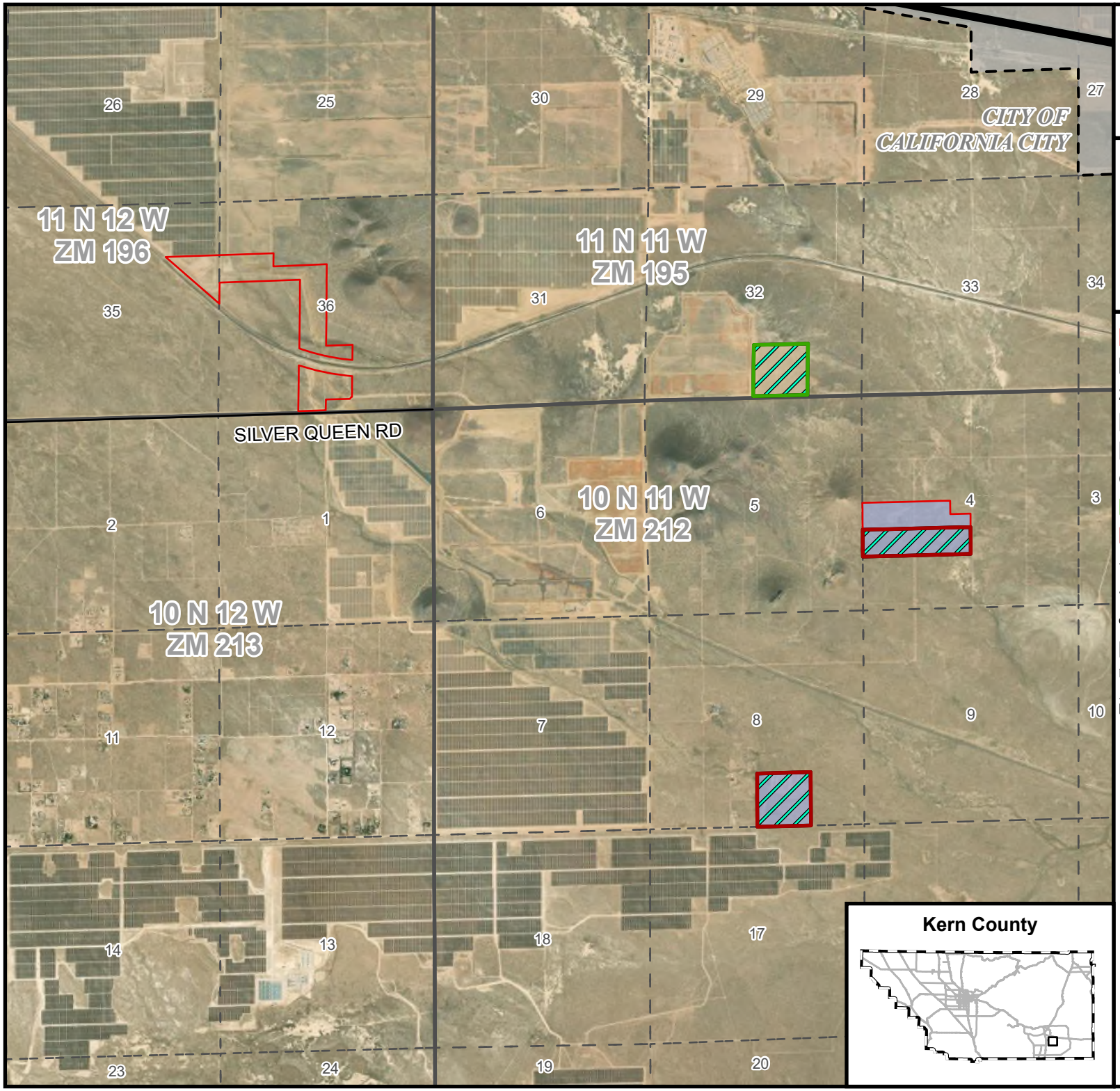
Kern County

Kern County Planning & Natural Resources Department



Galaxy Solar PV & Storage Project

Galaxy Project Infill Area

Figure 5. Project Infill Area CUP and ZCC Boundaries

Galaxy Solar Storage, LLC

- Infill Area
- Additional Solar PV Panels

ZCC

- ZCC No. 4, Map No. 212
- ZCC No. 5, Map No. 195

CUP

- CUP No. 4, Map No. 195
- CUP No. 7, Map No. 212
- Arterials
- Named Road
- State Highway
- Township Range
- Section
- City Limits

T10N/R11W - Sec. 4, 8
T11N/R11W - Sec. 32
T11N/R12W - Sec. 35, 36

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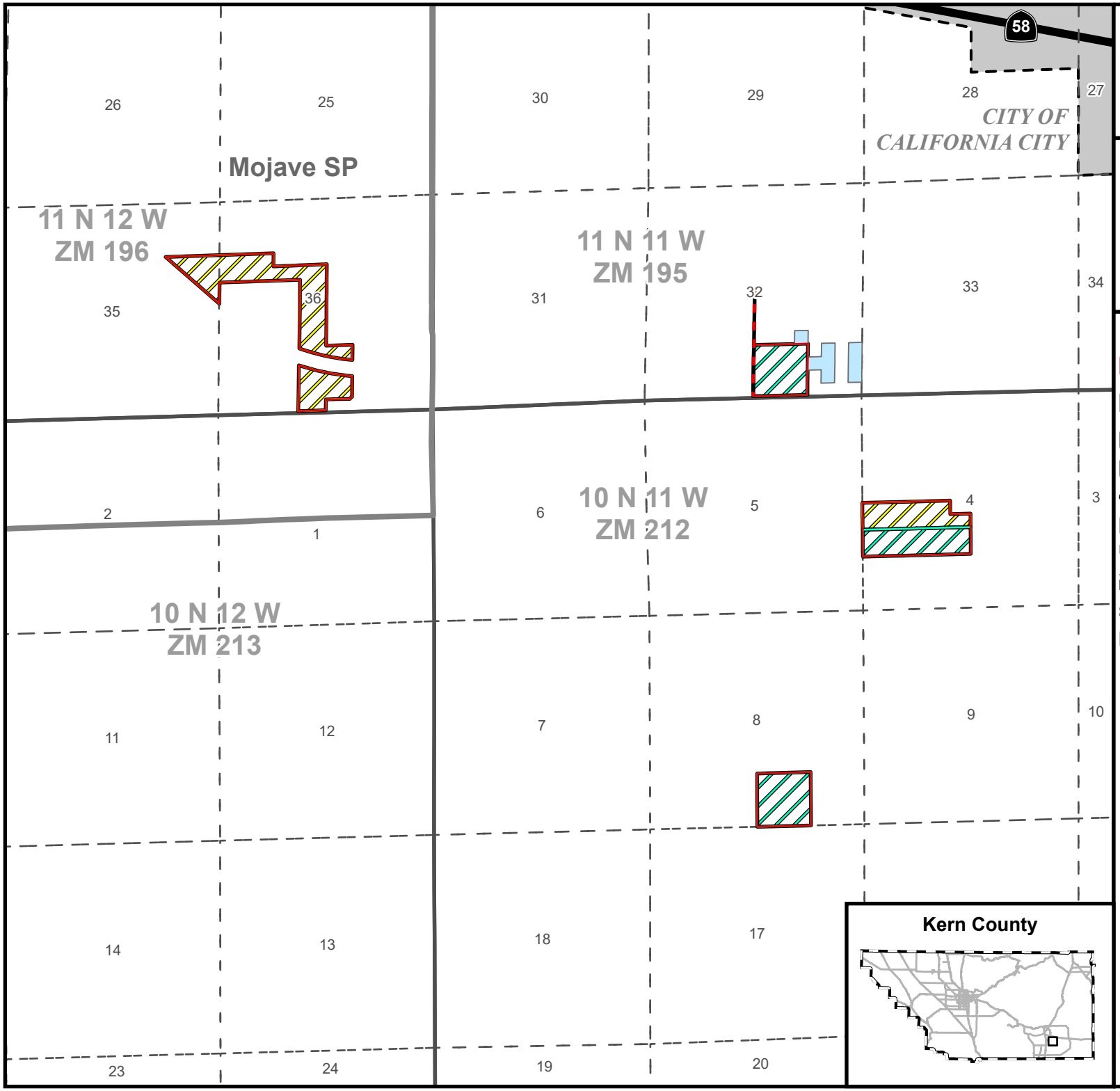
Kern County

Kern County Planning & Natural Resources Department



Galaxy Solar PV & Storage Project

Galaxy Project Infill Area

Figure 6. Project Infill Area General Plan Amendment (Circulation)

Galaxy Solar Storage, LLC

- Midsection Lines to Be Removed
- Infill Area
- Other Applicant Controlled Parcels
- Infrastructure Corridor
- Additional Solar PV Panels
- State Highway
- Township Range
- Section
- City Limits

Specific Plan

- Mojave

T10N/R11W - Sec. 4, 8
T11N/R11W - Sec. 32
T11N/R12W - Sec. 35, 36

Created on: 5/27/2026

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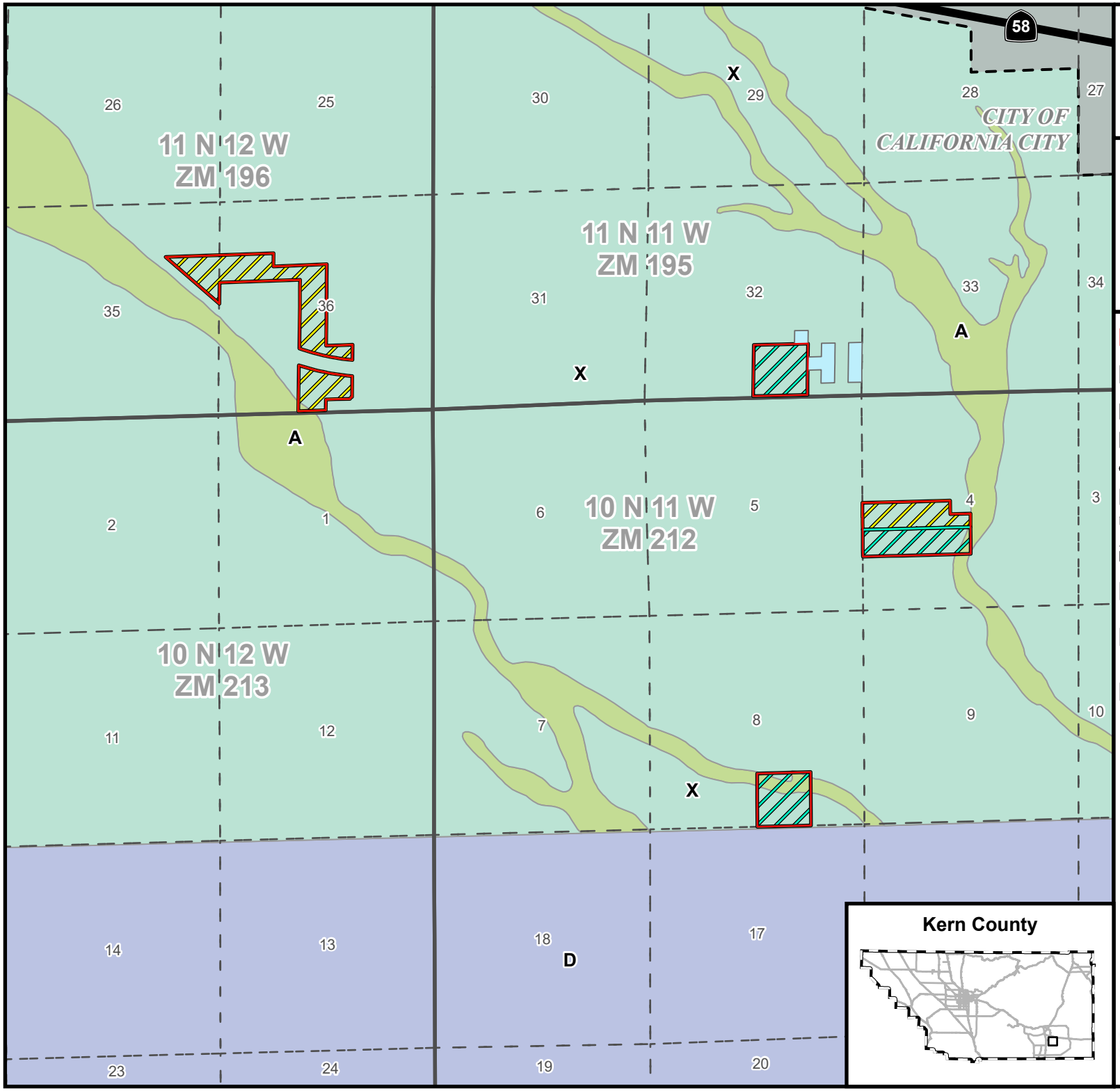
Kern County Planning & Natural Resources Department



Galaxy Solar PV & Storage Project

Galaxy Project Infill Area

Figure 7. Project Infill Area Floodplain Map

Galaxy Solar Storage, LLC

- Infill Area
- Other Applicant Controlled Parcels
- Infrastructure Corridor
- Additional Solar PV Panels
- State Highway
- Township Range
- Section
- City Limits
- A - No Base Flood Elevations Determined
- D - Areas in Which Flood Hazards are Undetermined but Possible
- X - Areas Determined to be Outside the 0.2% Annual Chance Floodplain

T10N/R11W - Sec. 4, 8
T11N/R11W - Sec. 32
T11N/R12W - Sec. 35, 36

Created on: 5/27/2026

0 3,000 6,000 ft

Kern County

Kern County Planning & Natural Resources Department